HP ProLiant Essentials
Rapid Deployment Pack—Windows Edition
Installation Guide

January 2005 (Fourth Edition)
Part Number 352869-004
Product Version 2.00

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About This Guide

This guide provides detailed information about installing the Rapid Deployment Pack—Windows Edition, configuring the Deployment Server and the provided scripted installation jobs and files, and upgrading to newer versions of software.

Audience Assumptions

To install and configure the Rapid Deployment Pack, it is assumed that you have knowledge of:

- Installing Microsoft® Windows®, either from CD or a network, using the unattend.txt mechanism
- Basic Windows management and administration, such as manipulating files and folders in Windows Explorer, creating users and groups in Computer Management, and setting share permissions
- Network infrastructure
- (For Linux deployments only) Installing Linux either from CD or a network
- (For Linux deployments only) Basic Linux command line interface operations; for example, mounting and unmounting floppy and CD-ROM drives, creating directories, and copying files
- (VMware only) Installing VMware either from CD or a network
- (VMware only) Using the VMware Management Interface to set up ESX and create virtual machines

To perform tasks after the installation is complete, it is assumed that you have knowledge of editing files within Windows and Linux.

Related Documents

HP recommends reviewing the following documentation before reading this guide:

- *HP ProLiant Essentials Rapid Deployment Pack Planning Guide*
- HP ProLiant Essentials Rapid Deployment Pack—Windows Edition Support Matrix

HP recommends reviewing the *HP ProLiant Essentials Rapid Deployment Pack—Windows Edition User Guide* after reading this guide.

All of the documents can be found in .pdf format at http://www.hp.com/servers/rdp, from the Rapid Deployment Pack CD autorun utility, at \docs on the product CD, and at .\docs on the Deployment Server.

Where to Go for Additional Help

Refer to the following sources for additional information about the Rapid Deployment Pack.

Online Resources

- HP ProLiant Essentials Rapid Deployment Pack website at http://www.hp.com/servers/rdp
- HP ProLiant Essentials Rapid Deployment Pack Knowledge Base at http://www.hp.com/servers/rdp/kb
- *ITRC User Forum "ProLiant Deployment & Provisioning"* at http://forums.itrc.hp.com
- Altiris website at http://www.altiris.com

Telephone Numbers

For the name of your nearest HP authorized reseller:

- In the United States, call 1-800-345-1518.
- In Canada, call 1-800-263-5868.

For HP technical support:

- In North America:
  - — Call 1-800-HP-INVENT (1-800-474-6836). This service is available 24 hours a day, 7 days a week. For continuous quality improvement, calls may be recorded or monitored.
  - — If you have purchased a Care Pack (service upgrade), call 1-800-633-3600. For more information about Care Packs, refer to the HP website at http://www.hp.com.
- Outside North America, call the nearest HP Technical Support Phone Center. For telephone numbers for worldwide Technical Support Centers, refer to the HP website at http://www.hp.com/support.

1

Licensing

Overview

A license enables a server to be deployed and managed by the Altiris Deployment Server. One license is required for each server or virtual machine being managed. After a license is applied to a specific server, the license cannot be removed or transferred to another server.

A license file contains licenses for a predetermined number of servers. License files are applied without reference to the Rapid Deployment Pack version and are not specific to Rapid Deployment Pack—Windows Edition or Rapid Deployment Pack—Linux Edition, as long as the one-license-per-server requirement is met.

NOTE: The term "server" as described here in terms of licensing is referring to a physical server or a virtual machine. One license is required for each physical server or virtual machine.

Licensing Options

The Rapid Deployment Pack offers five license purchasing options:

- One-node license—Use this license to deploy and manage one server through the Deployment Server.
- Ten-node license—Use this license to deploy and manage 10 servers through the Deployment Server.
- Flexible Quantity license—These kits are available to obtain an exact quantity of licenses in the purchase of a single software option kit.
- Activation Key Agreement—This option provides the ability to order a key in the quantity desired and for a specific time and purchase a license for each server deployed over time.
- HP BladeSystem enclosure bundle—A bundle of eight or 20 licenses are available with an HP BladeSystem enclosure.

For more information about Flexible Quantity license and Activation Key Agreement options, refer to the ProLiant Essentials Licensing Options at http://www.hp.com/servers/rdp.

Obtaining Licenses

The following sections explain how to obtain evaluation or purchased licenses for your servers.

Evaluation Licenses

Two types of evaluation licenses are available for use:

- A 10-node, seven-day evaluation license is built into the Deployment Server. No license file is required. The evaluation license can be applied during the Deployment Server installation.
- To obtain and use a 10-node, 30-day evaluation license:
  a. Access http://www.hp.com/servers/rdp/eval.
  b. Follow the online instructions to complete the registration process. An evaluation license file will be e-mailed to you.

Purchased Licenses

Use your unique 20-character product registration number to obtain a license file. The registration number is located on a label on the outside back panel of a purchased software packaging box. The registration number is in the form:

xxxxx-xxxxx-xxxxx-xxxxx

IMPORTANT: Keep your product registration number for future reference.

1. Access http://www.hp.com/servers/rdp/register.
2. Follow the online instructions to complete the registration process. A license file will be e-mailed to you.

Additional purchased licenses can be transferred or combined with already registered licenses. Refer to the instructions at http://www.hp.com/servers/rdp/register.

Applying a License File

The following sections explain how to apply evaluation or purchased licenses to your servers and how to add or replace existing licenses.

Applying License Files During a First-Time Installation

A 10-node, seven-day evaluation license is built into the Deployment Server. To apply this license, select **Free 7 day license** during a first-time installation at the Deployment Server Client Access Point Information screen.

To apply a purchased or evaluation license file, enter the path to the license file in the License File field during the installation at the Deployment Server Client Access Point Information screen.

To view the number of licensed nodes from the console, select **Help>About.**

Applying License Files During an Upgrade Installation

To continue using existing licenses after performing an upgrade, select **Upgrade using existing licenses** during the installation at the Deployment Server Client Access Point Information screen.

To view the number of licensed nodes from the console, select **Help>About.**

Adding Licenses to an Existing Installation

To apply additional purchased licenses to an existing installation, add the new license file to your Deployment Server:

1. Shut down all connections to the Deployment Server Console and Deployment Server Web Console.
2. Run the Altiris Product Licensing Utility by selecting **Start>Programs>Altiris> Deployment Solution>Product Licensing Utility.**

   Enter the path to the new license file path in the Activation Key File Information field, and then click **Next.**

   Follow the online instructions to apply your additional licenses.

To view the number of additional licensed nodes from the console, select **Help>About.**

Replacing Licenses in an Existing Installation

If you have previously purchased, returned, or transferred licenses and have obtained a new license file to replace your existing license file:

1. Shut down all connections to the Deployment Server Console and Deployment Server Web Console.
2. Run the Altiris Product Licensing Utility by selecting **Start>Programs>Altiris> Deployment Solution>Product Licensing Utility.**
3. Enter the path to the new license file path in the Activation Key File Information field, and then click **Next.**
4. Follow the online instructions to apply your licenses, ensuring that the **Replace all existing license Activation Keys with this new Activation Key** checkbox is selected.

To view the number of licensed nodes from the console, select **Help>About.**

2

Prerequisites

Installation Overview

The Rapid Deployment Pack installation consists of several components installed on a Windows-based server.

- Microsoft .NET Framework (required)
- Microsoft SQL Server 2000 Desktop Engine (MSDE 2000) with Service Pack 3a

  IMPORTANT: Database management software is required. MSDE 2000 with Service Pack 3a is provided with the Rapid Deployment Pack if database software is not already installed.

- Altiris Deployment Server
- Altiris Deployment Server Hotfix
- ProLiant Integration Module

The Altiris Deployment Server consists of subcomponents that can be installed on the same physical server or distributed across multiple servers. These subcomponents include:

- Deployment Server service
- Deployment Server Console
- Deployment Server Web Console
- Preboot eXecution Environment (PXE) service
- Client Access Point (file share)

If you will be deploying Linux distributions, ProLiant Integration Module subcomponents must be installed on a Linux-based Network File System (NFS) server.

Installation Requirements

This section describes the requirements to successfully install each component of the Rapid Deployment Pack.

NOTE: The Rapid Deployment Pack cannot be installed through a Terminal Services or remote shell connection.

Network Infrastructure Requirements

The Rapid Deployment Pack is designed to perform optimally with Dynamic Host Configuration Protocol (DHCP) and PXE in the network environment. If PXE is used to perform remote deployment of servers, DHCP must be installed and accessible on the network before the Altiris Deployment Server installation to ensure correct installation of PXE services.

System Requirements

The following system requirements for the deployment server, NFS server, and target servers must be met before installing the Rapid Deployment Pack.

Deployment Server

The deployment server hardware and network configuration must meet the following requirements:

- Intel® Pentium® III or higher processor
- At least 256 MB RAM
- CD-ROM drive
- Network connection, configured with a static IP address

  IMPORTANT: It is difficult to change the IP address configuration for the Deployment Server after installation. Set the appropriate IP address before installing the Rapid Deployment Pack.

- Correct date and time

The deployment server software and configuration must meet the following requirements:

- A supported Windows operating system installed (for supported operating systems, refer to the *HP ProLiant Essentials Rapid Deployment Pack—Windows Edition Support Matrix)*
- Available disk space
  - 1.5 GB for the Rapid Deployment Pack base installation
  - At least 500 MB for each Windows operating system to deploy
  - At least 600 MB for each VMware operating system to deploy
  - At least 60 MB for each Linux distribution to deploy
  - Additional space to store any captured disk images or application installation files
- Microsoft Internet Information Services (IIS) FTP service if you want to deploy VMware ESX Server
- ProLiant Support Pack for Windows installed to provide the latest supported network drivers for the Deployment Server
- IIS with ASP.NET running if you want to install and use the Deployment Server Web Console

Be sure to have the following items available:

- A license file for purchased licenses or 30-day evaluation licenses (for information about licensing, refer to Chapter 1 of this guide)
- Windows 98 Second Edition boot diskette or CD (required for creating PXE images and boot diskettes)
- Operating system files for Windows 2000, Windows Server 2003, and/or VMware ESX Server

For additional information about requirements for the Deployment Server, refer to the *Altiris Deployment Solution 6.1 Product Guide* at http://www.hp.com/servers/rdp.

NFS Server

The NFS server hardware and network configuration must meet the following requirements:

- CD-ROM drive (optional)
- A network connection configured with a static IP address

The NFS server software and configuration must meet the following requirements:

- A Linux operating system installed
- ProLiant Support Pack for Linux installed to provide the latest supported network drivers for the NFS server
- At least 3 GB of disk space available on the /usr directory for each Linux distribution to be deployed
- NFS software installed and configured (if a firewall is installed on the server, the configuration must allow incoming NFS connections; for example, UDP port 2049 for a typical NFS port)

Be sure to have Red Hat Linux and/or SUSE LINUX distribution files available. These files can be obtained from distribution CDs, a specified network location (previously mounted before starting the ProLiant Integration Module setup), or an ISO image.

Target Servers

The Rapid Deployment Pack offers support for HP BladeSystems, including ProLiant BL servers and Blade PCs, as well as select ProLiant ML/DL servers. For details on target server requirements, such as minimum ROM and firmware versions and supported systems for each operating system, refer to the *HP ProLiant Essentials Rapid Deployment Pack—Windows Edition Support Matrix* for your Rapid Deployment Pack version.

3

Installation

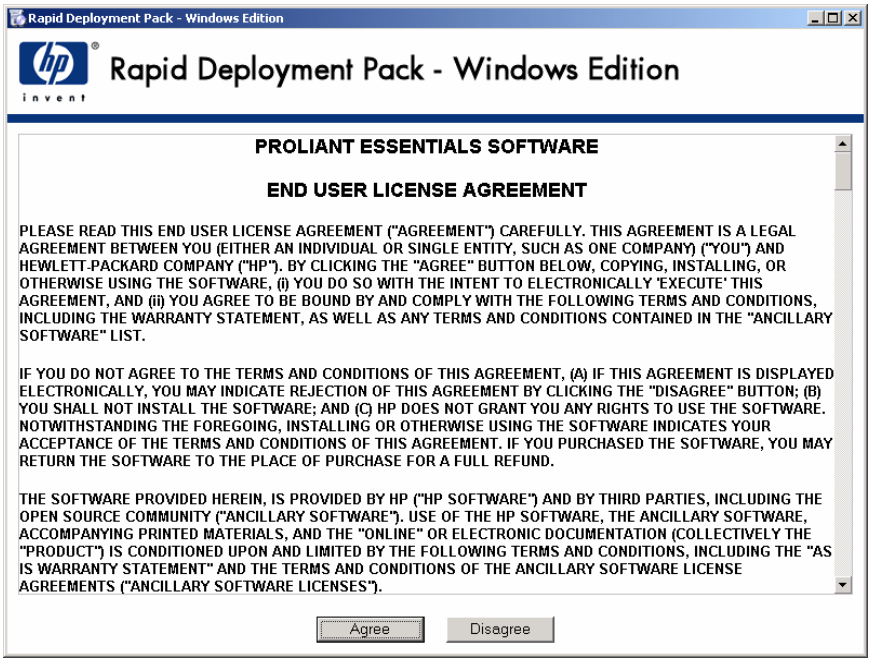
Complete the following procedures to install the Rapid Deployment Pack—Windows Edition.

NOTE: To upgrade the Rapid Deployment Pack software currently installed on the Deployment Server, refer to Chapter 4.

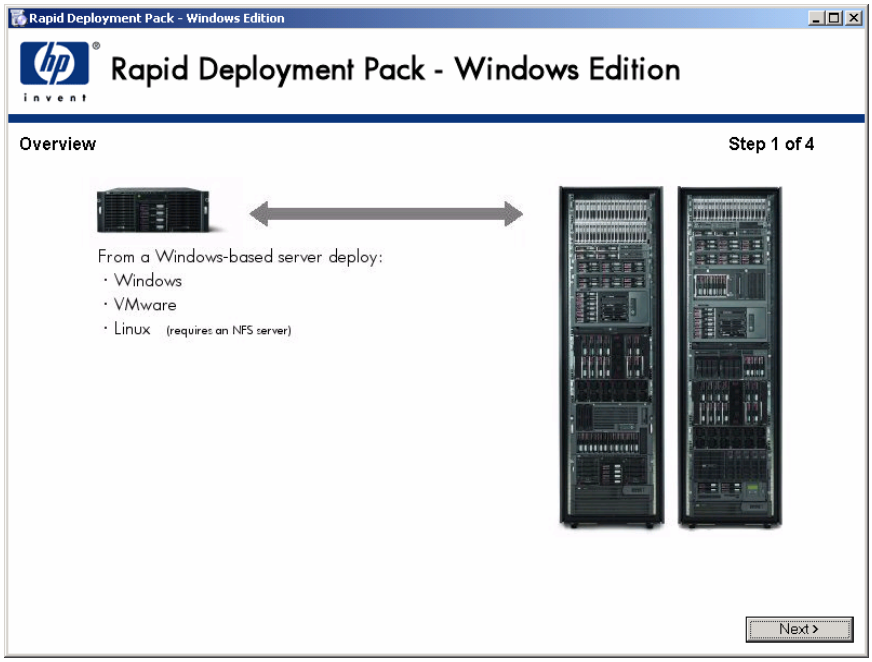
1. Insert the Rapid Deployment Pack—Windows Edition CD 1 into the intended Deployment Server. The autorun utility appears.

   NOTE: To manually access the autorun utility, run [*CD-ROM drive:]*\autorun.exe from the Rapid Deployment Pack—Windows Edition CD 1.

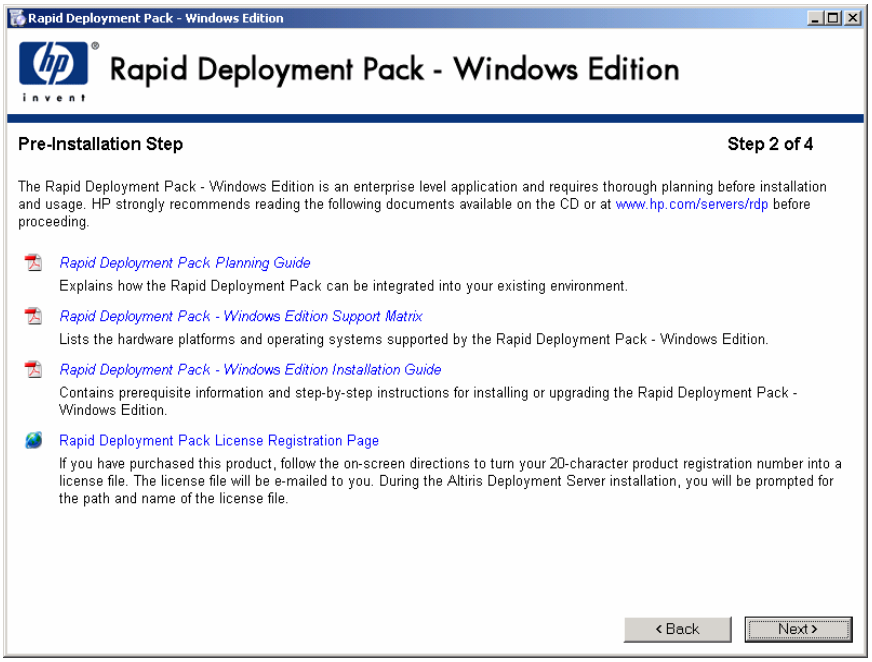
2. Read the license agreement. If you agree to the terms of the license agreement, click **Agree** to continue.



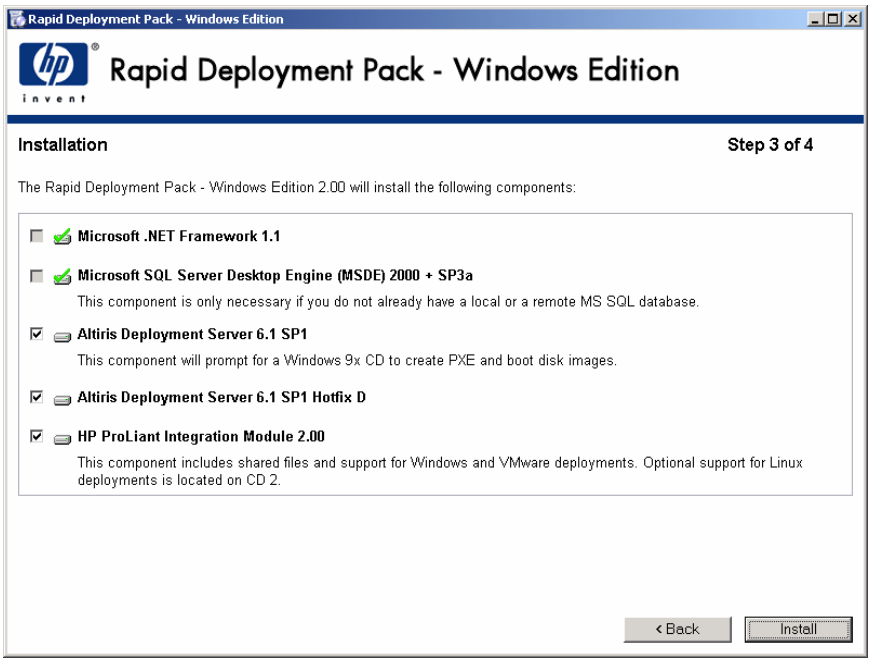
3. Read the overview information, and click **Next.**



4. Review the pre-installation step, and click **Next.**



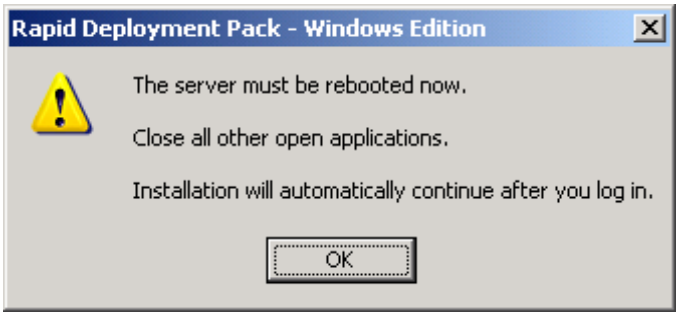
5. Verify that the appropriate components are selected for installation. If Microsoft .NET Framework and MSDE 2000 SP3a are not already installed on the server, they are automatically selected. If you plan to use an existing database, deselect **MSDE.**



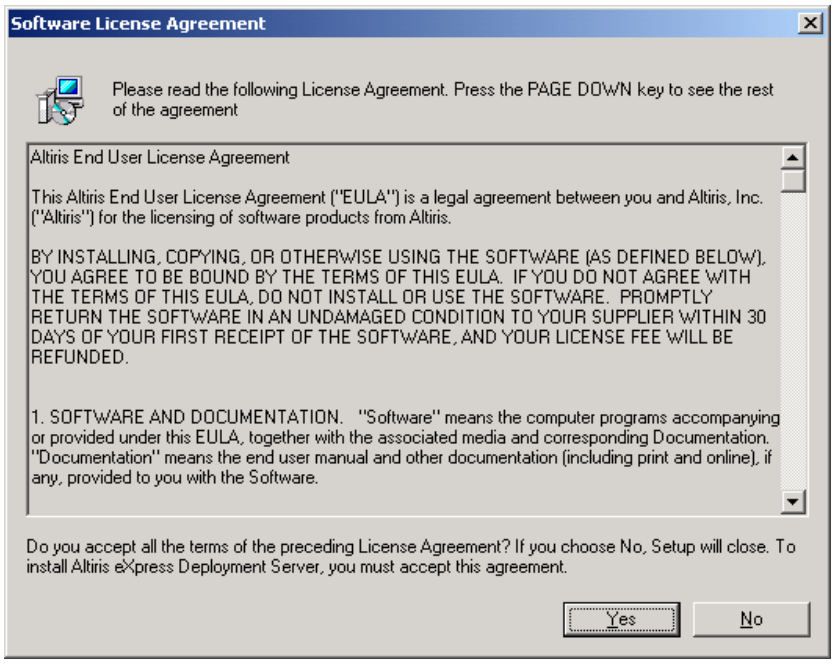
6. Click **Install.** If neither Microsoft .NET Framework nor MSDE 2000 SP3a were selected for installation, proceed to step 10.
7. If Microsoft .NET Framework was selected for installation, follow the on-screen instructions.
8. If MSDE 2000 SP3a was selected for installation, follow the on-screen instructions.

   IMPORTANT: The server must be rebooted after the MSDE 2000 SP3a installation.

9. Click **OK** when prompted to reboot the server. The installation process automatically continues after you log in.

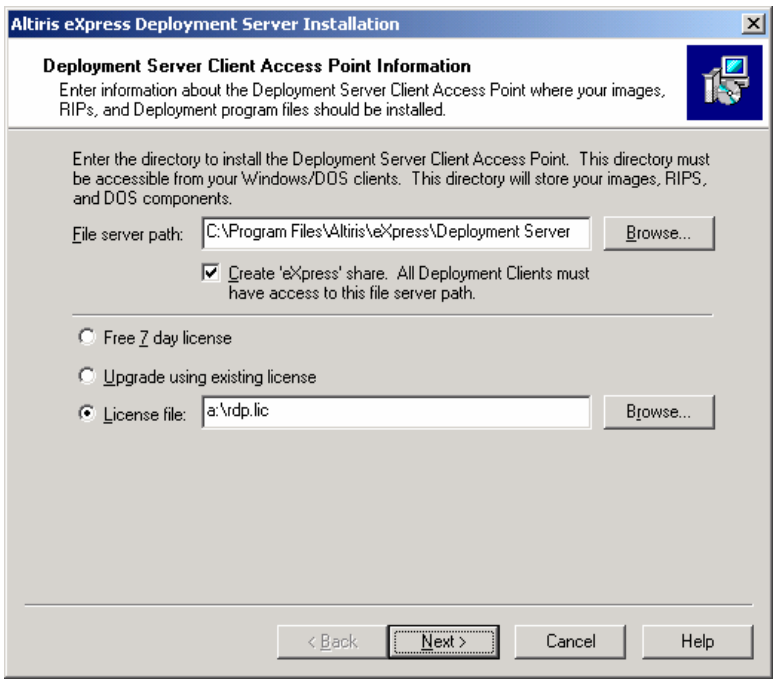


10. If the Altiris Deployment Server was selected for installation, read the license agreement and click **Yes** if you agree to the terms of the license agreement. If the Altiris Deployment Server was not selected for installation, proceed to step 27.



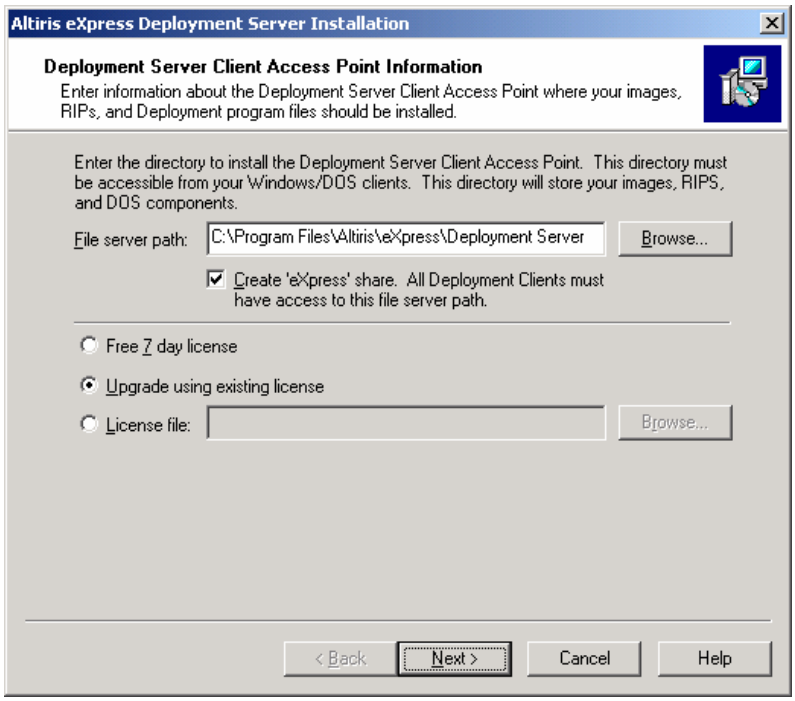
11. Select the appropriate licensing option. For more information about licensing, refer to Chapter 1.

    — For a first-time installation, select **Free 7 day license,** or select **License file** and enter the license file path and name. Click **Next.**



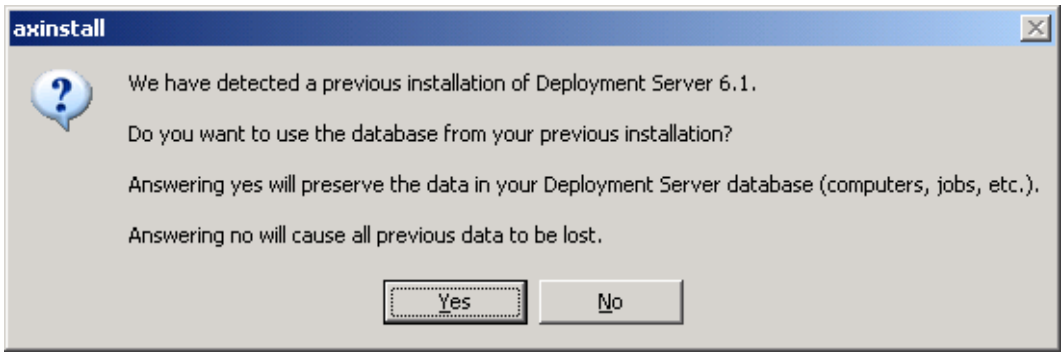
— For an upgrade installation, select **Upgrade using existing license,** and click **Next.**

CAUTION: You must select **Upgrade using existing license** during an upgrade installation instead of selecting **License file** and reapplying your original license file to avoid losing existing licenses.

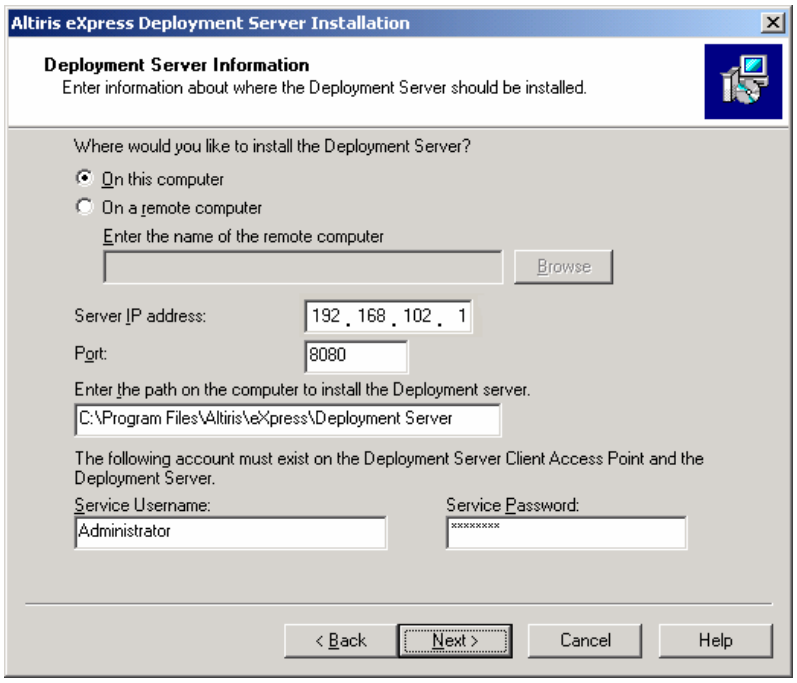


12. If upgrading, click **Yes** to retain the data in the existing database.

IMPORTANT: If you do not retain existing data, all deployment history, customized jobs, and servers listed in the Deployment Server Console are lost.

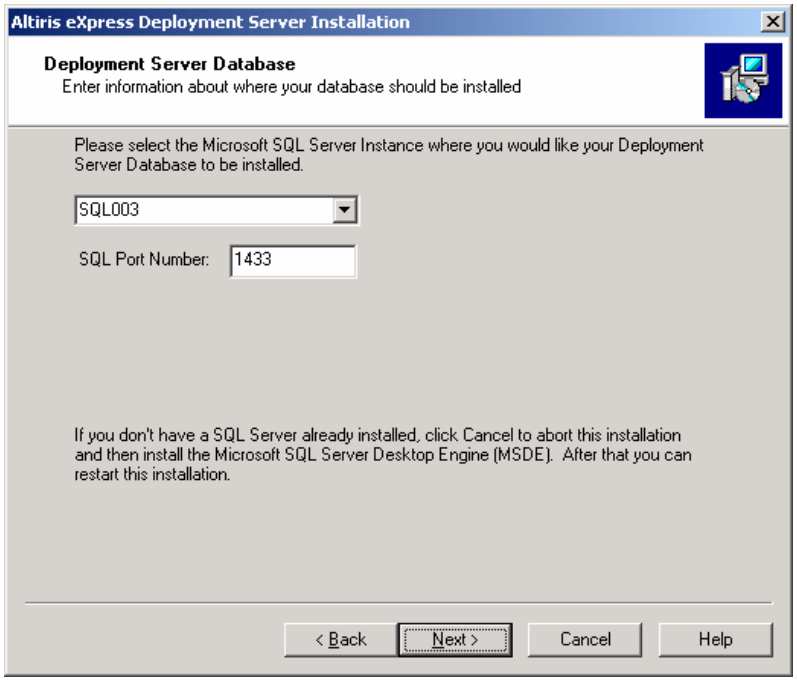


13. If the Deployment Server has multiple NICs, specify the NIC address to use as the Deployment Server interface in the Server IP address field. Enter the service credentials for the Deployment Server, and click **Next.**

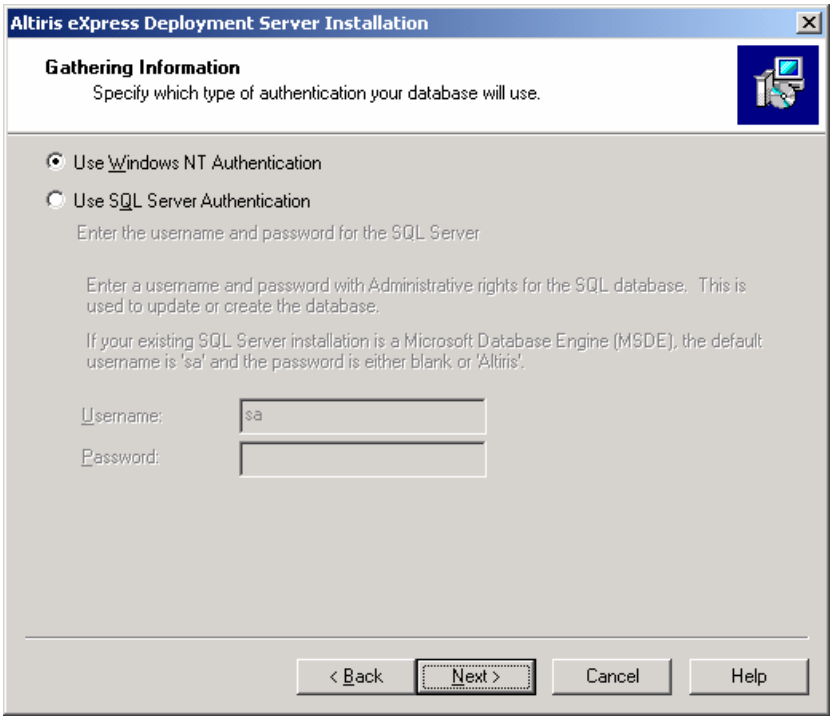


14. Enter the name of the server where the database is located, and click **Next.**

NOTE: If the database is located on a remote server, you might be prompted for authentication. Enter a user name and password with administrative rights.

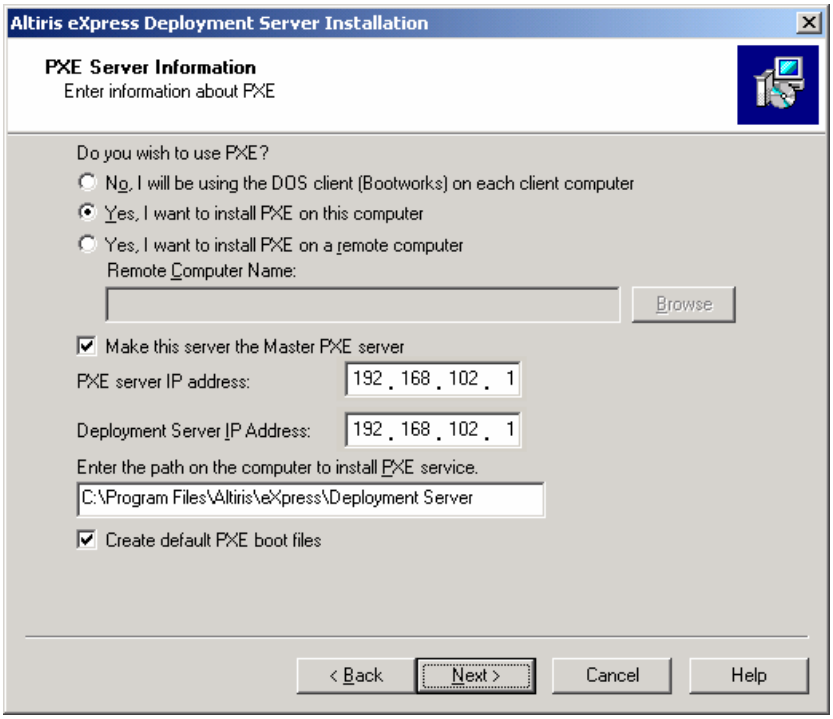


15. Enter the appropriate database authentication method, and click **Next.**



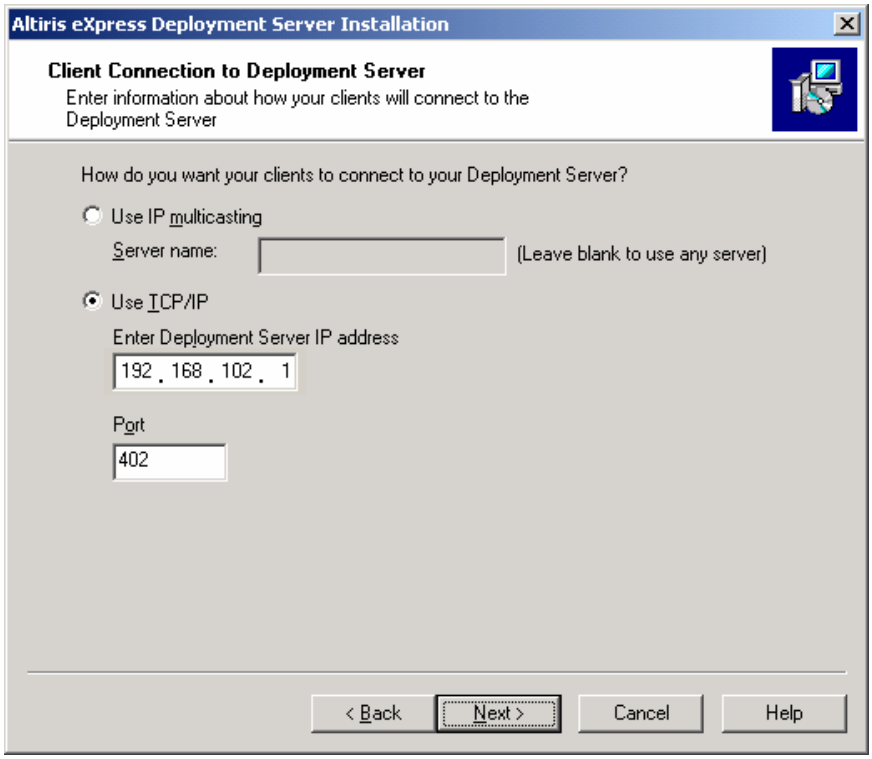
16. Specify the location where PXE is to be installed, and click **Next.**

IMPORTANT: Do not deselect the **Create default PXE boot files** checkbox.

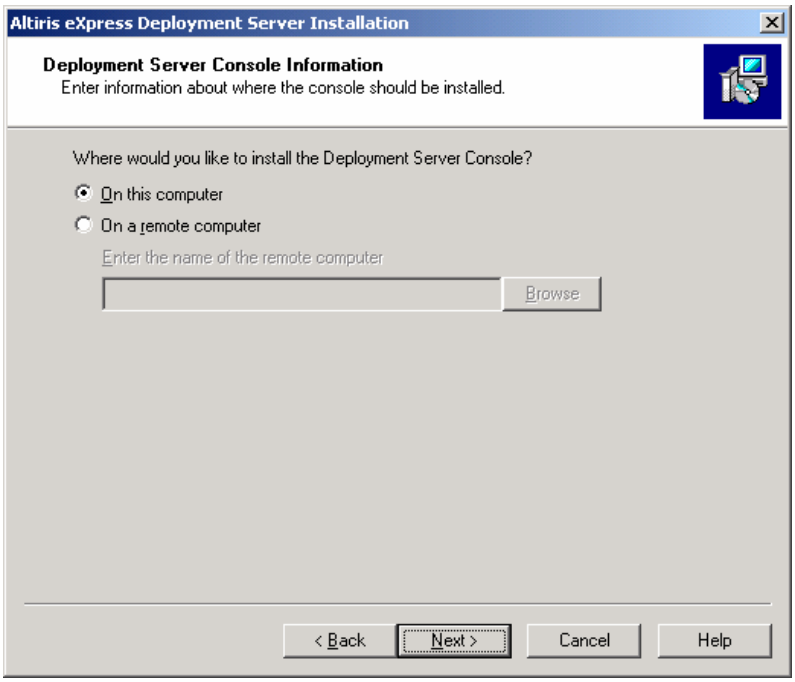


17. Click **OK.**

18. Specify how clients will connect to the Deployment Server, and click **Next.**

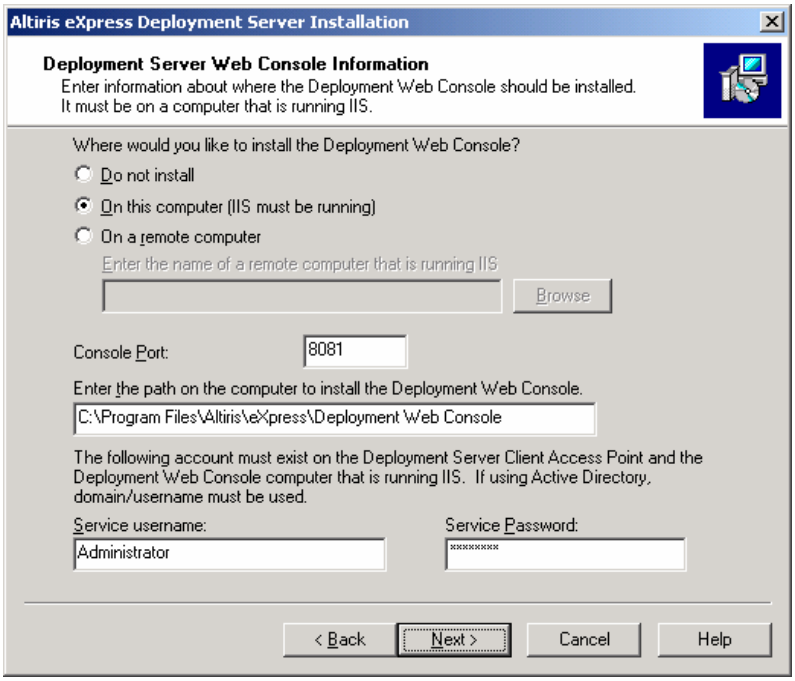


19. Specify the location where the Deployment Server Console is to be installed, and click **Next.**



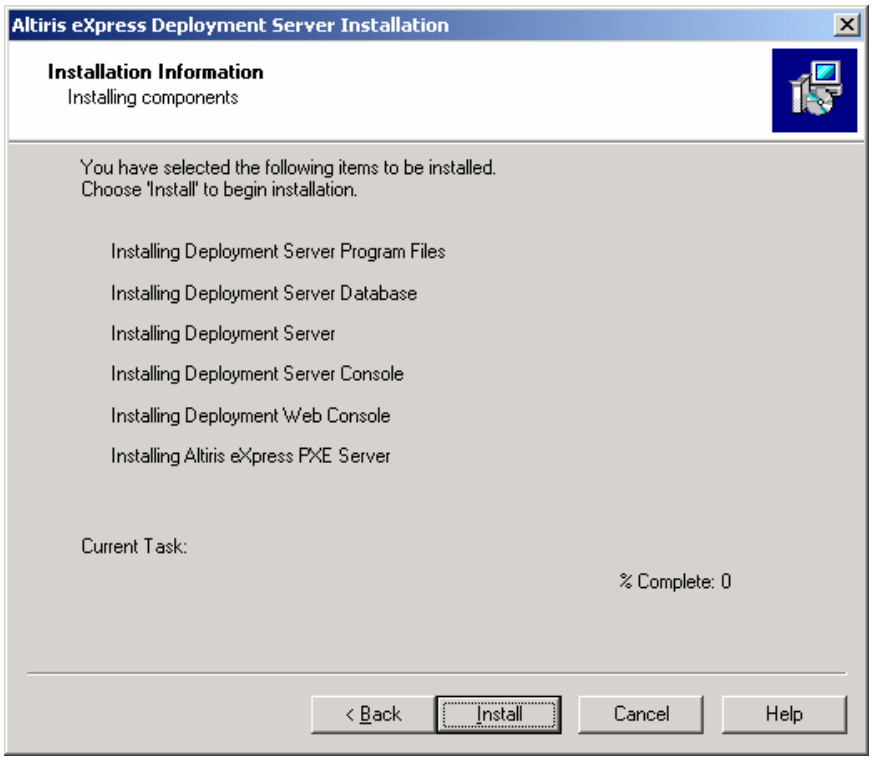
20. Specify the location where the Deployment Server Web Console is to be installed (optional), and click **Next.**

IMPORTANT: Microsoft IIS with ASP.NET must be running on the system where the Deployment Server Web Console is installed.

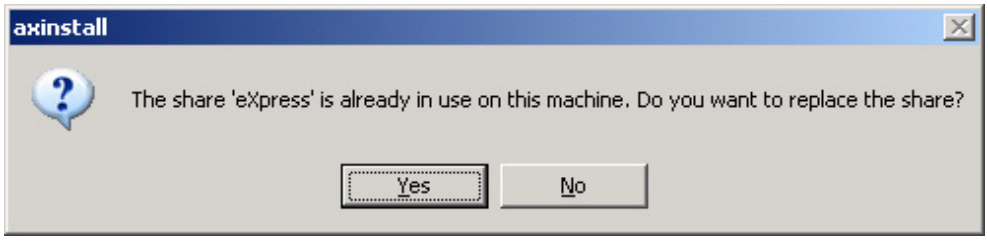


21. Click **Install** to start the Deployment Server software installation.

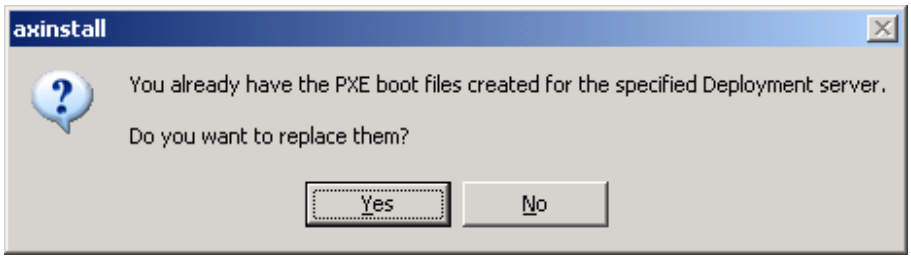
NOTE: Only components selected for installation are listed.



22. If upgrading, click **Yes** when prompted to replace the eXpress share.



23. If upgrading, click **Yes** when prompted to replace the PXE boot files.



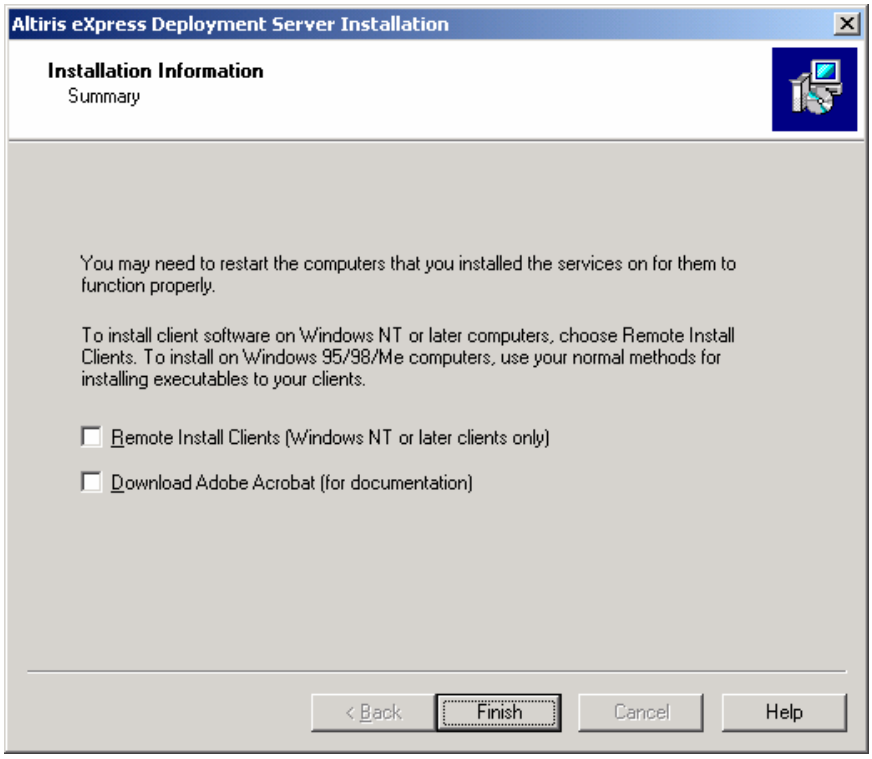
24. The Altiris Boot Disk Creator prompts for a location to extract DOS files used for creating PXE images and boot diskettes. Specify a location, such as a Windows 9*x* boot diskette, CD, or network location, and click **Next.** Follow the on-screen instructions to install the files.

IMPORTANT: If DOS files are provided from a diskette, the installation program might also prompt for optional DOS files. To omit copying the optional DOS files, select **No longer prompt for optional files,** and click **Finish.**

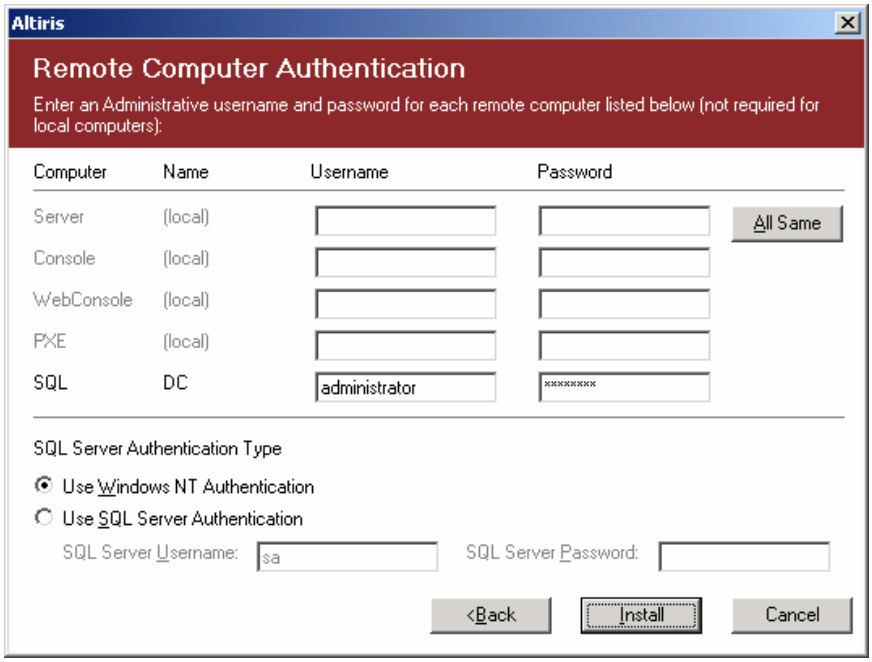
NOTE: If you are performing an upgrade installation and have previously provided DOS files, you are not prompted to install the files again.

25. If the Windows 9*x* CD was used to install DOS files, reinsert the Rapid Deployment Pack CD—Windows Edition CD 1, and click **OK** when prompted.

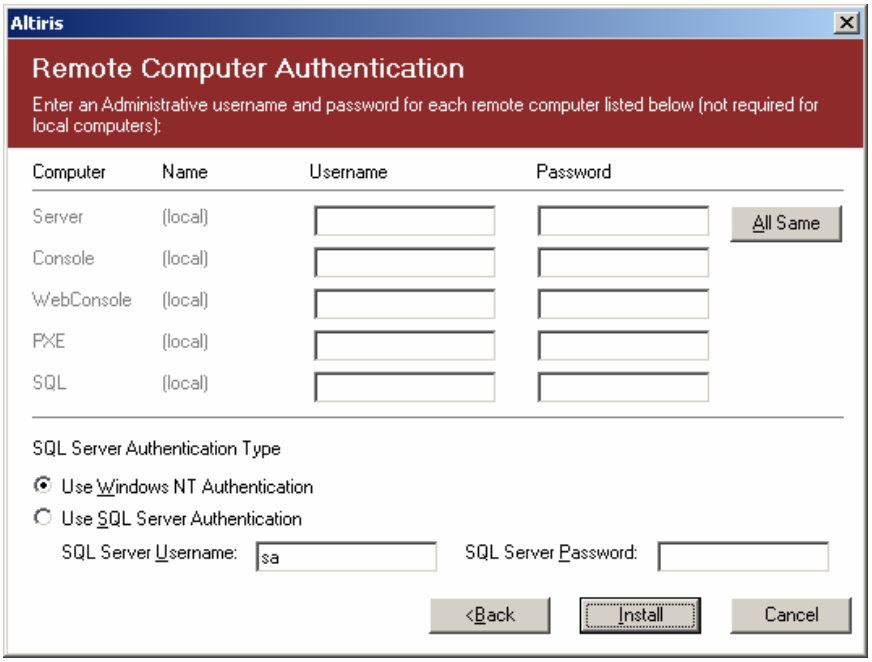
26. Click **Finish.**



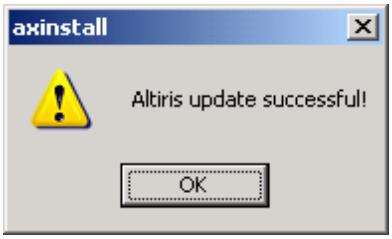
27. If Altiris Hotfix software was selected for installation, click **Install.** If not, proceed to step 30.



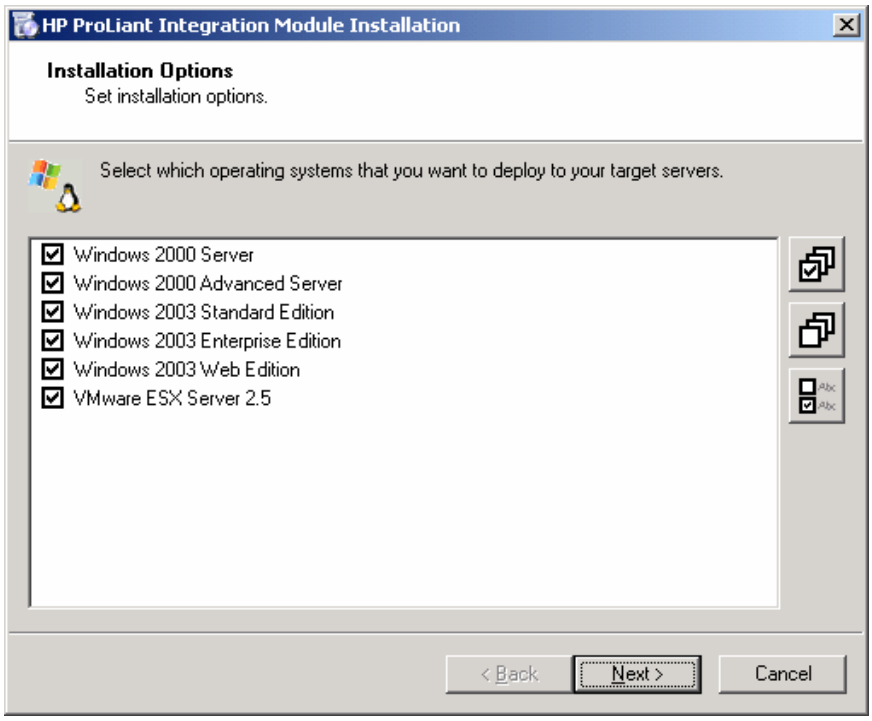
28. Verify a valid user name and password for any remote components, and click **Install.**



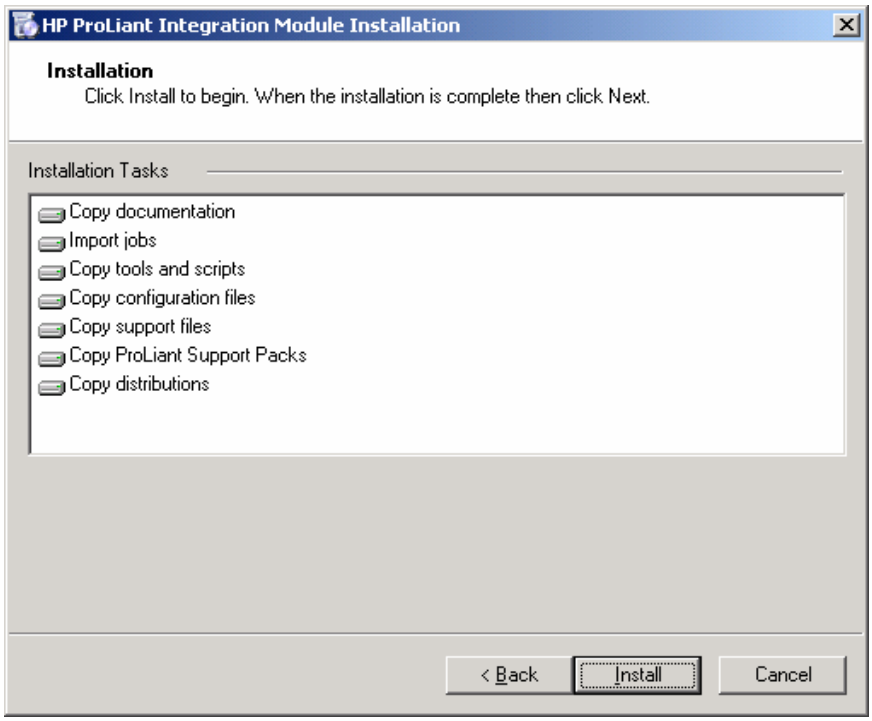
29. Click **OK** when a message indicates that the Altiris update is complete.



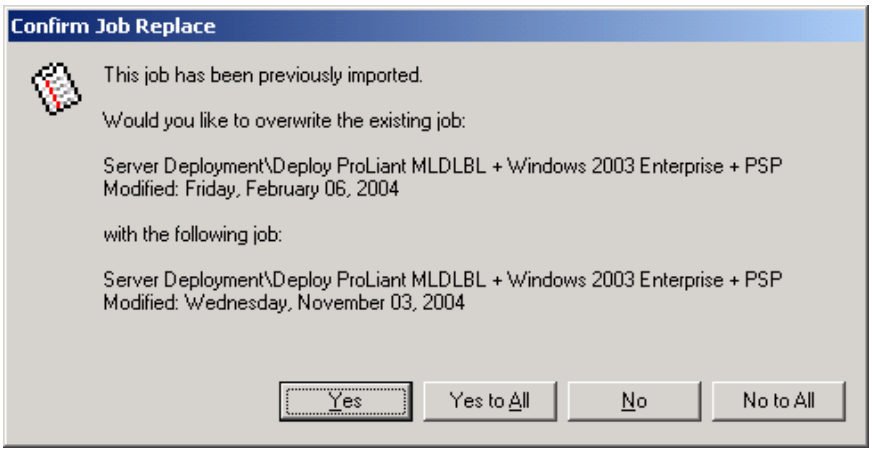
30. If ProLiant Integration Module software was selected for installation, select the Windows and/or VMware operating systems that will be deployed, and click **Next.** If not, proceed to step 39.



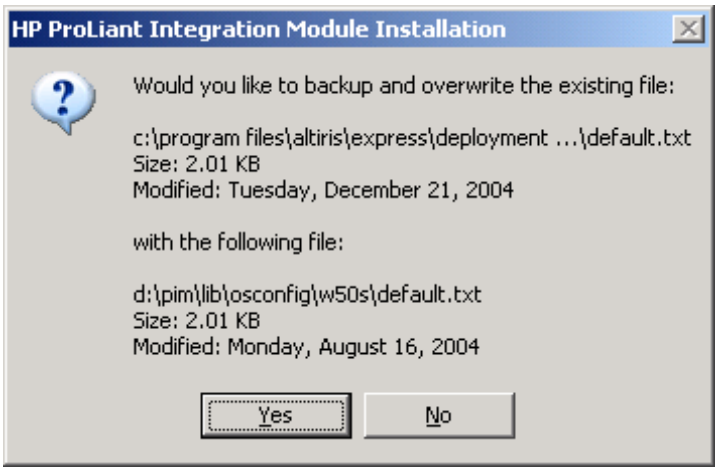
31. Click **Install.**



32. If upgrading, you might be prompted to overwrite the existing jobs with new jobs.

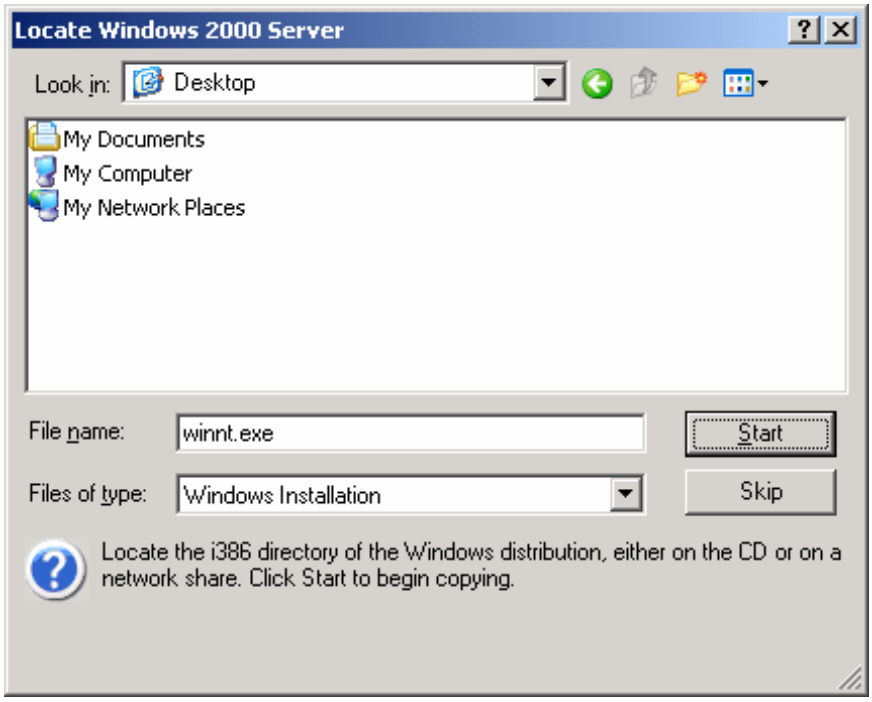


33. If upgrading, you might be prompted to save backup files for any default initialization or for Windows or VMware installation answer files that have been modified.

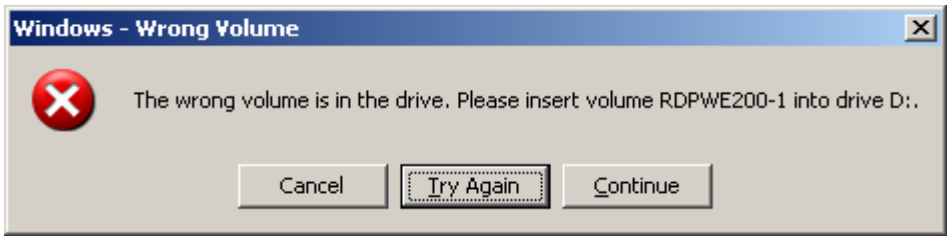


34. Specify the Windows i386 and/or VMware root directory location for the indicated distribution. Click **Start** to copy files necessary for scripted installs.

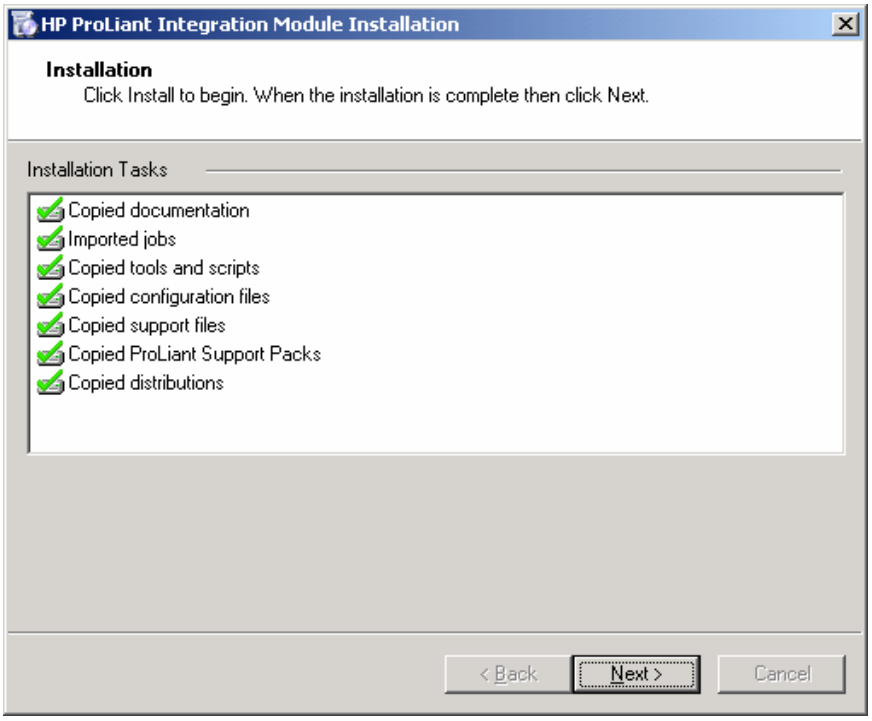
    IMPORTANT: If you omit copying the Windows or VMware operating system files at this time by clicking **Skip,** refer to Appendix A to manually install these files later. Manually copying the Windows or VMware operating system files produces the same results as copying the files during the Rapid Deployment Pack installation.



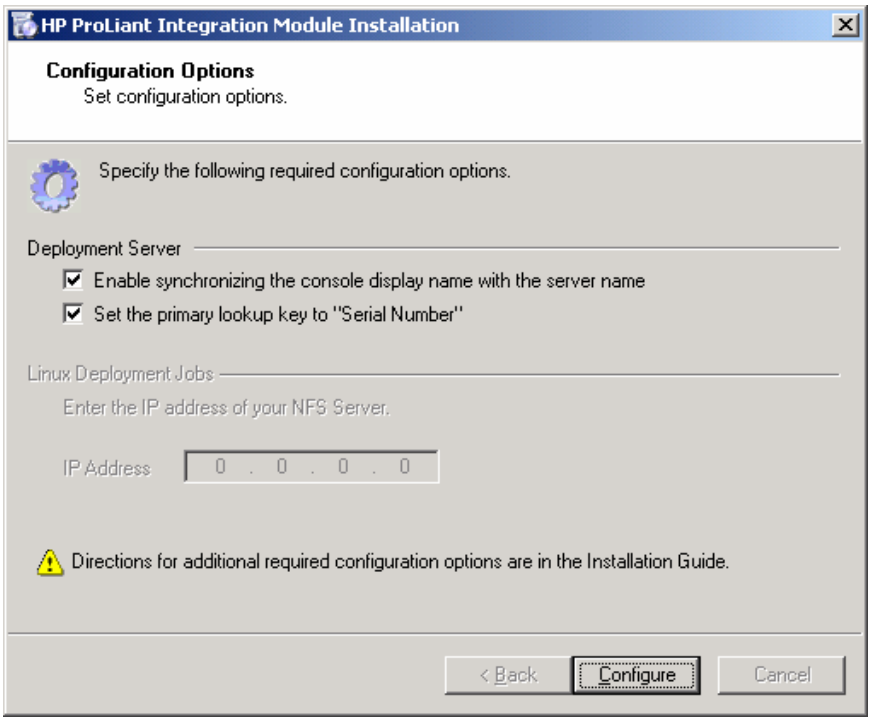
35. If Windows and/or VMware CDs were used to copy the operating system files, reinsert the Rapid Deployment Pack—Windows Edition CD 1 when prompted, and click **Try Again.**



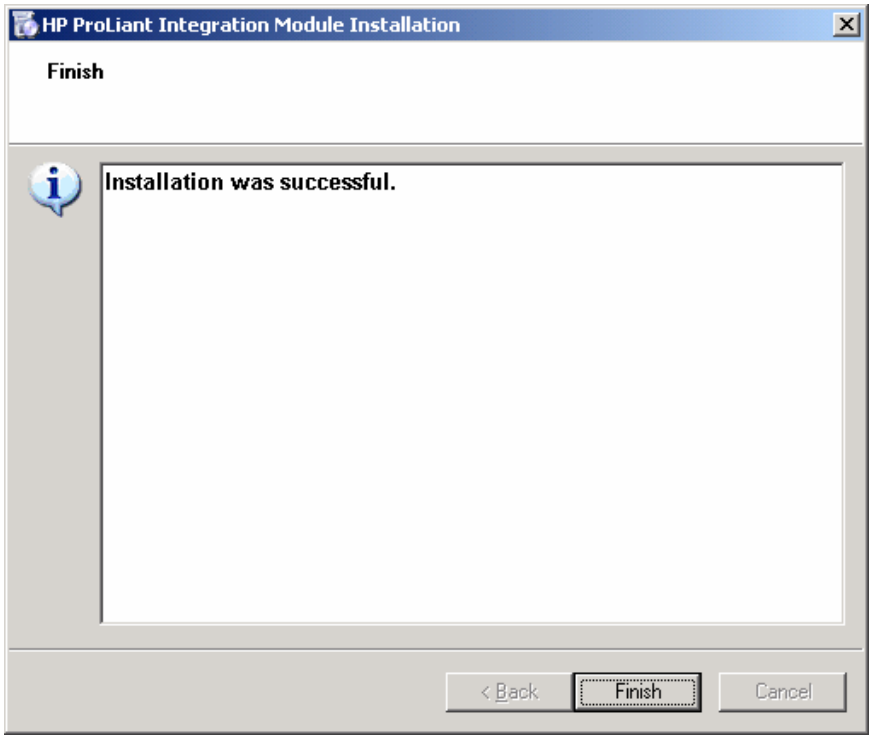
36. Click **Next.**



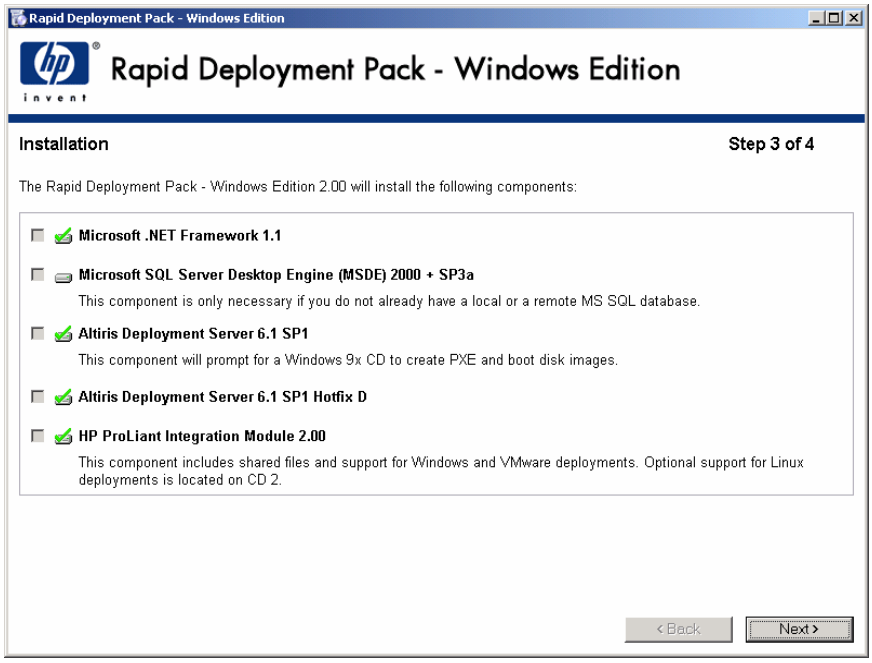
37. Specify the appropriate configuration options, and click **Configure.** For additional information or to change these configuration options later, refer to Appendix C.



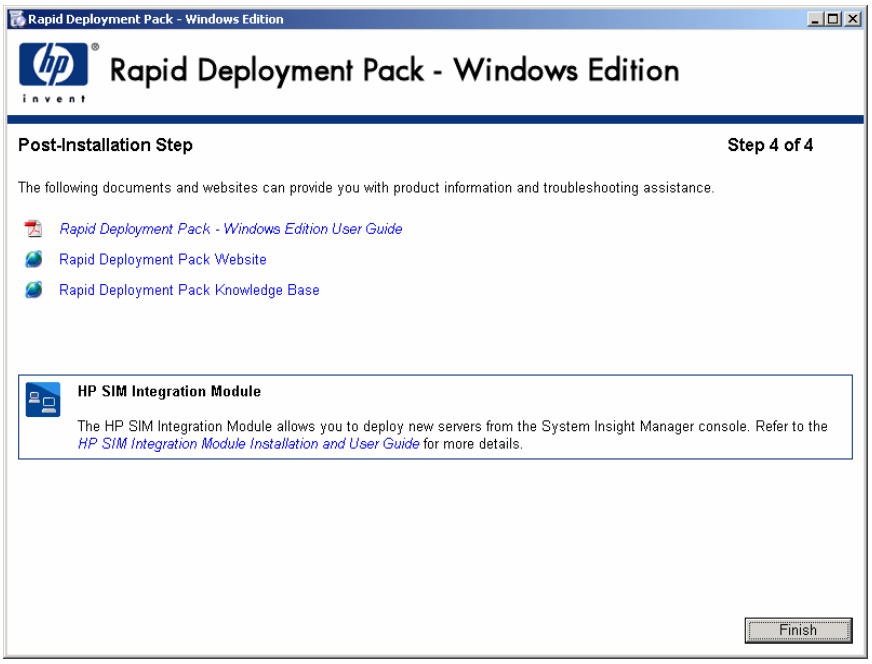
38. Click **Finish.**



39. Click **Next** at the autorun utility.

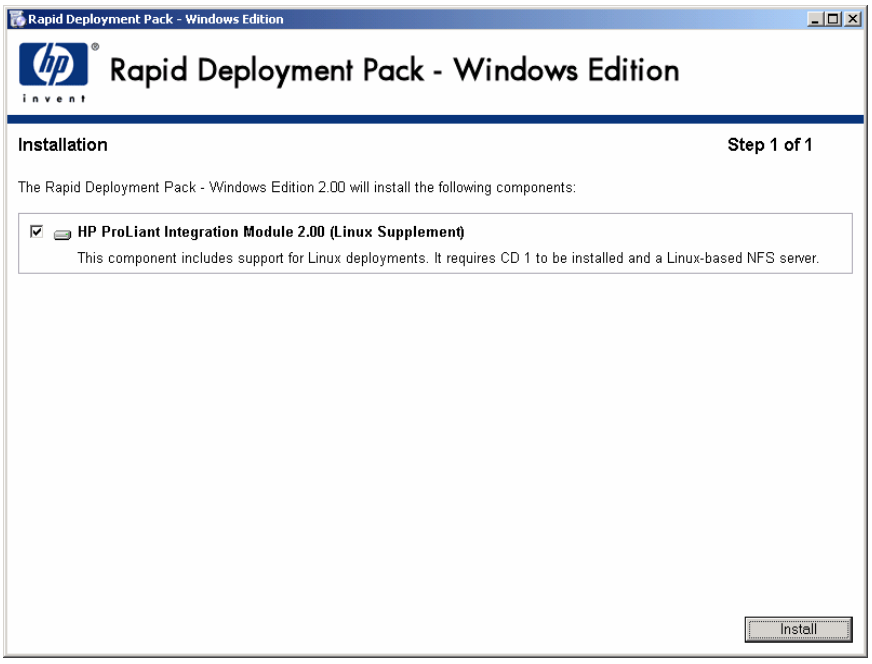


40. Review the post-installation step, and click **Finish** to complete the Rapid Deployment Pack—Windows Edition CD 1 installation. If you plan to deploy only Windows and/or VMware operating systems, the installation is complete. Before performing scripted installs, refer to Chapter 5 to complete the appropriate pre-deployment procedures.

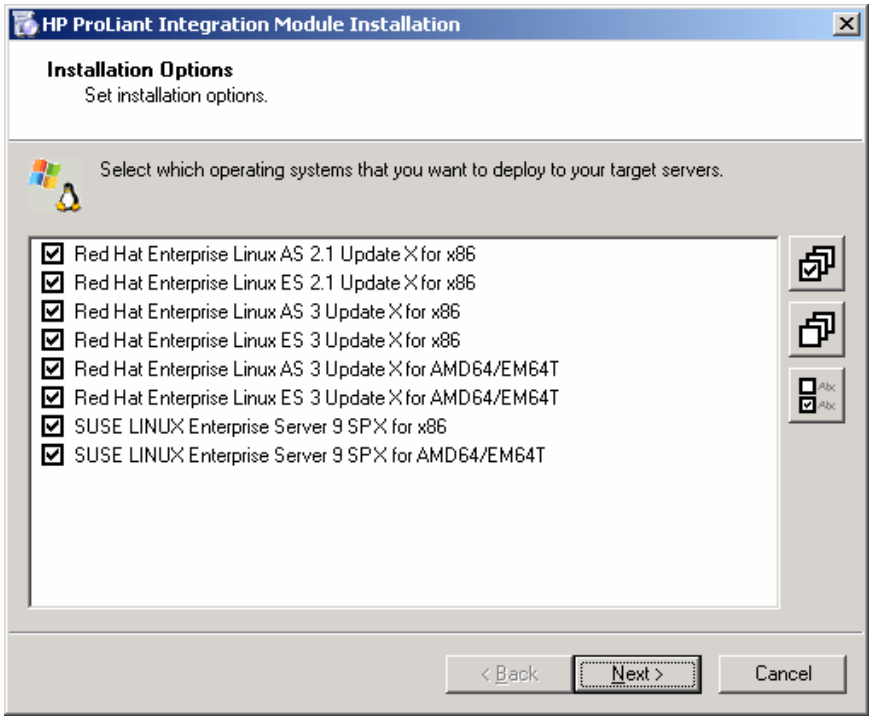


41. If you plan to deploy Linux distributions, insert the Rapid Deployment Pack—Windows Edition CD 2 into the Deployment Server. The autorun utility appears.

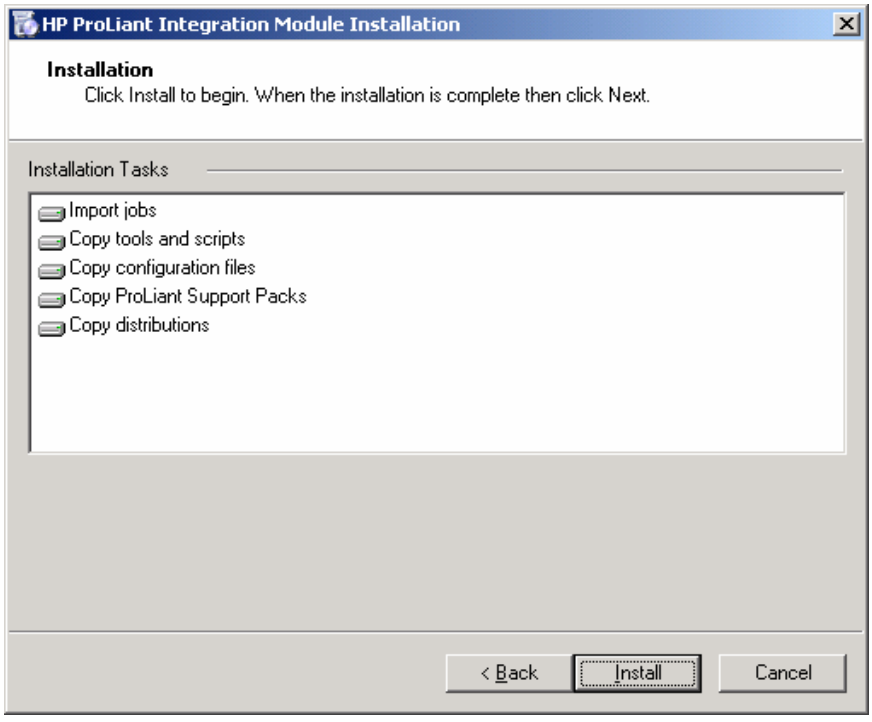
42. Click **Install.**



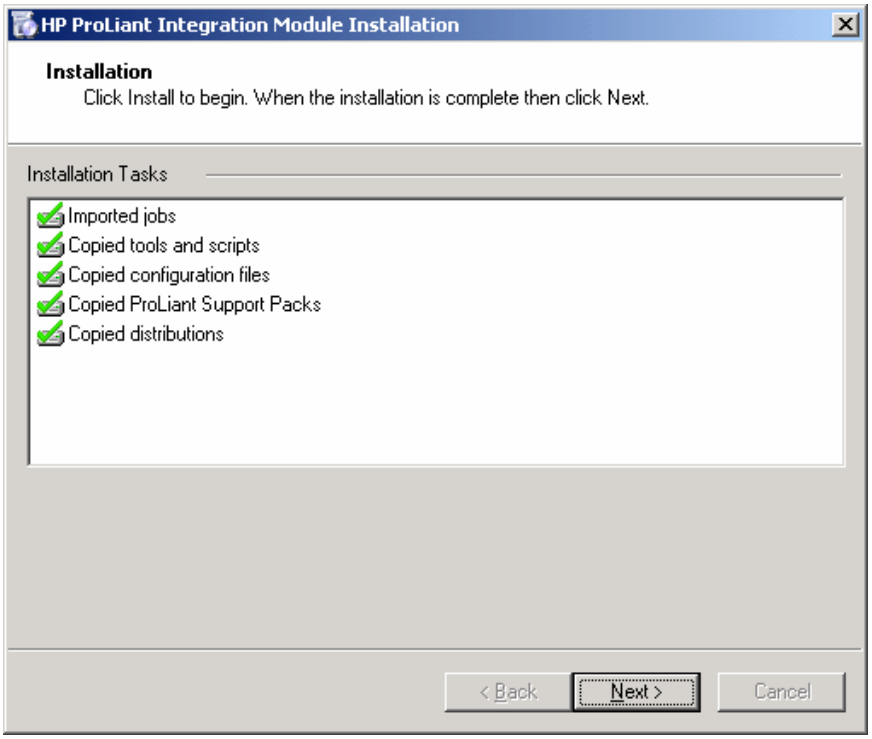
43. Select the operating systems that will be deployed, and click **Next.**



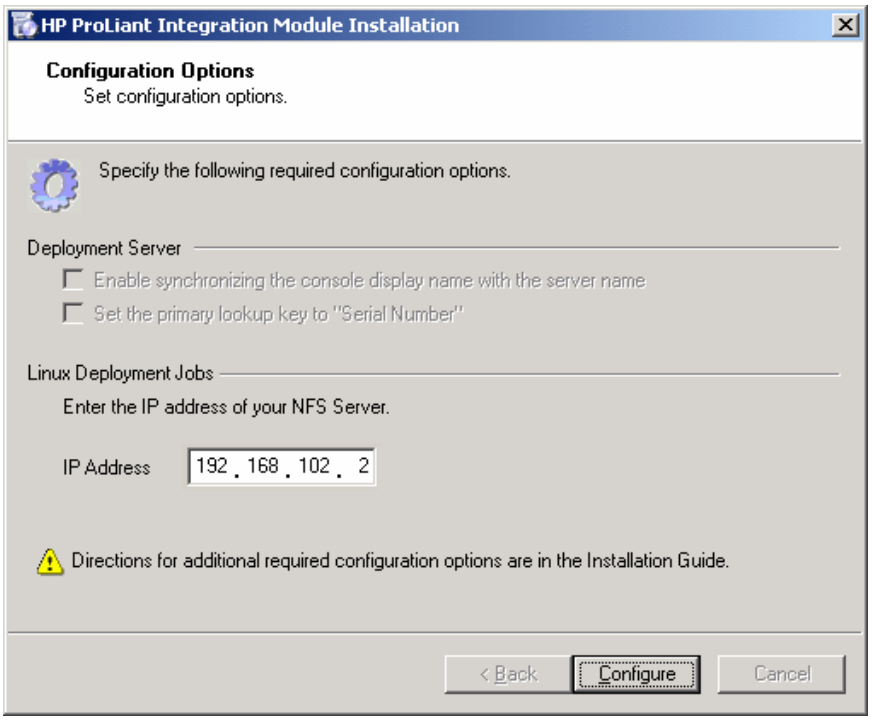
44. Click **Install.**



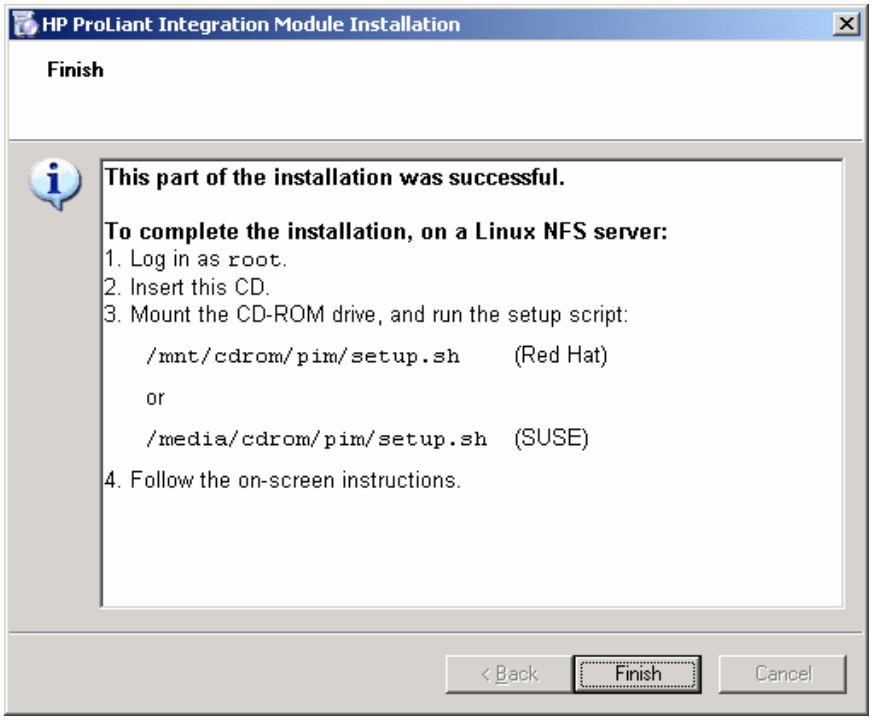
45. If upgrading, you might be prompted to overwrite the existing jobs with new jobs.
46. Click **Next.**



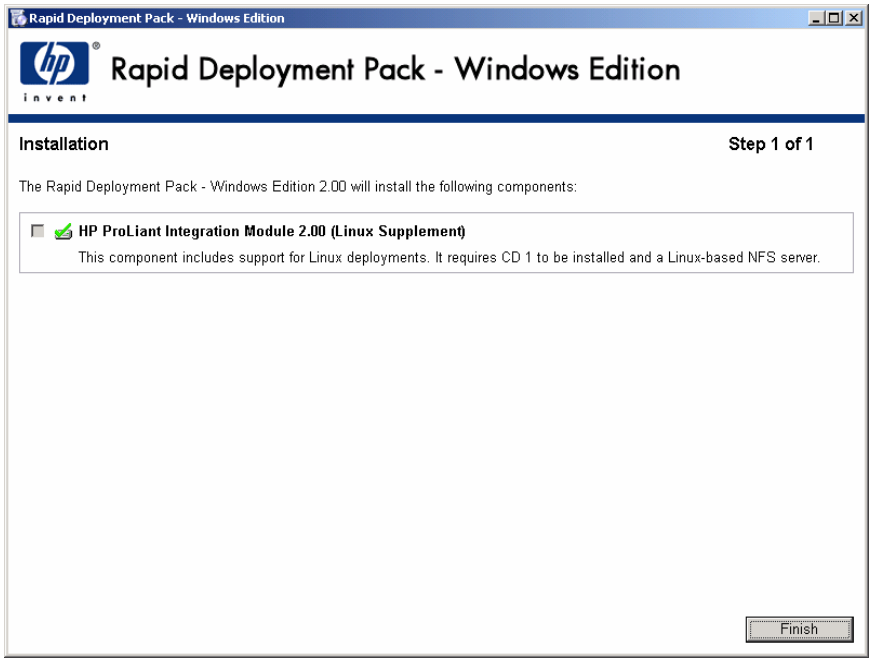
47. Specify the NFS server IP address, and click **Configure.** To change this setting later, refer to Appendix C.



48. Click **Finish.**



49. Click **Finish** at the autorun utility.



50. To complete the ProLiant Integration Module installation for Linux deployments, log in as `root` at a Linux NFS server.
51. Insert the Rapid Deployment Pack—Windows Edition CD 2.
52. Mount the CD:

    `mount /mnt/cdrom` (Red Hat Linux)

    or

    `mount /media/cdrom` (SUSE LINUX)
53. Run the setup script:

    `/mnt/cdrom/pim/setup.sh` (Red Hat Linux)

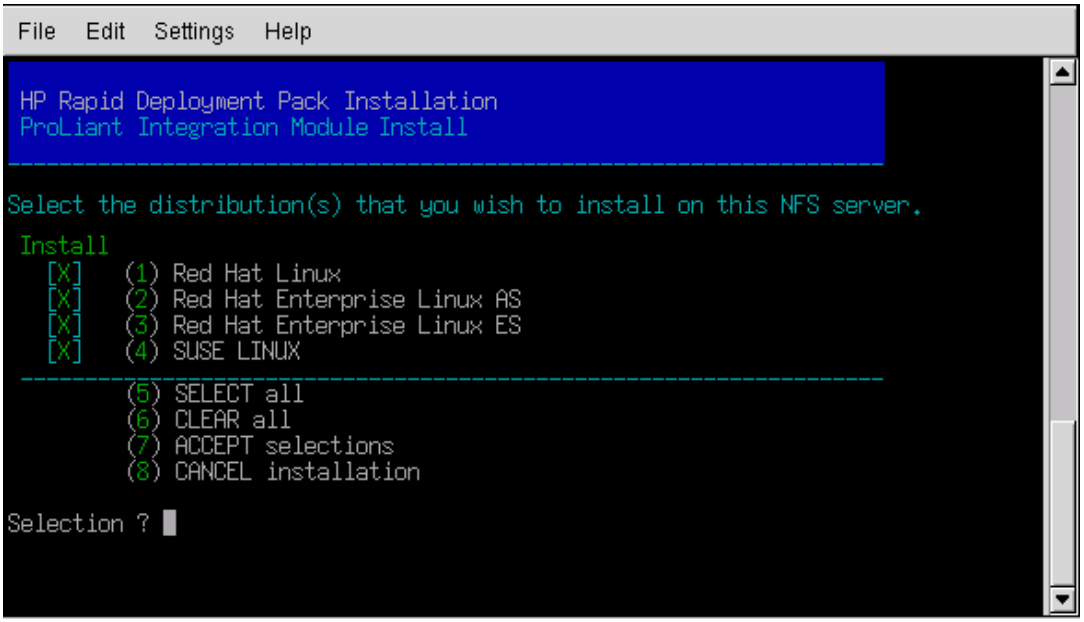
    or

    `/media/cdrom/pim/setup.sh` (SUSE LINUX)

NOTE: Do not change directory to the CD-ROM directory to run the setup script.

54. For each distribution to install, enter the corresponding selection number for the distribution, and press the **Enter** key. To select all distributions, enter the appropriate number to **SELECT all,** and press the **Enter** key.

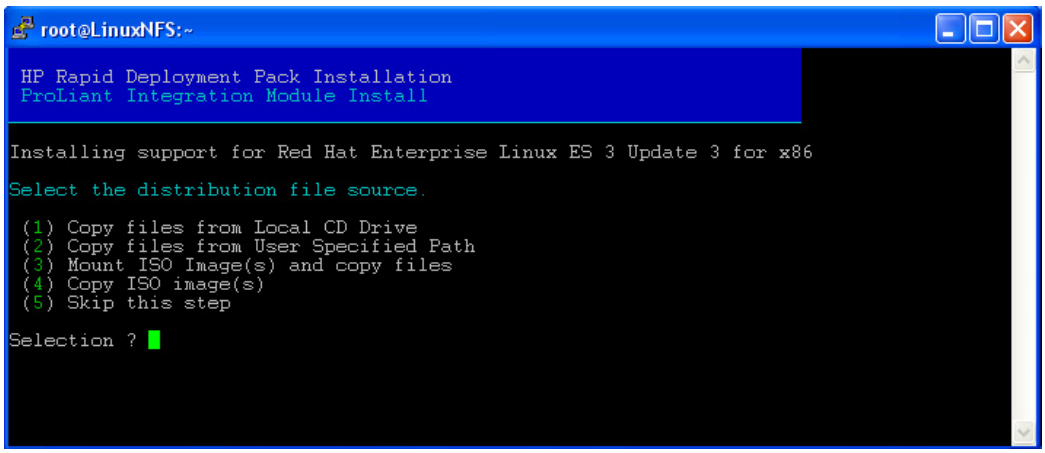
NOTE: Selection numbers vary depending on the number of available distributions.



55. After selecting the distributions to install, enter the appropriate number to **ACCEPT selections,** and press the **Enter** key.

56. The file copy process begins. Depending on the distribution, files can be copied from distribution CDs, a network location (previously mounted before starting the NFS installation), or an ISO image. If the installation answer files or distribution files have already been copied to the NFS server, you are prompted to overwrite the existing files for each distribution.

IMPORTANT: If you omit copying the Linux distribution files at this time by selecting **Skip this step,** refer to Appendix B to manually install these files later. SUSE LINUX distribution files must be copied during the ProLiant Integration Module installation.



When the installation is complete, a message displays on the console. Before performing scripted installs, refer to Chapter 5 to complete the appropriate pre-deployment procedures.

4

Upgrading

Complete the following procedures to upgrade the Rapid Deployment Pack software currently installed on the Deployment Server.

Pre-Installation Steps

IMPORTANT: The Rapid Deployment Pack upgrade must be completed using the Rapid Deployment Pack—Windows Edition CD autorun utility, ensuring that the **Upgrade using existing licenses** option is selected during the Altiris Deployment Server upgrade.

Before upgrading:

- If you obtained your existing licenses before 20 November 2003, you should have received a new license file validating your licenses for an Altiris 6.0 or later software upgrade and providing 10-year Annual Upgrade Protection. Before upgrading to the Rapid Deployment Pack 1.50 or later, apply this new license file with the Altiris Product Licensing Utility, ensuring that the **Replace all existing license Activation Keys with this new Activation Key** checkbox is **not** selected. This new license file is to be used in conjunction with your purchased licenses, not as a replacement. If you did not receive this license file, contact HP support before upgrading. Upgrading before applying a new license file can cause your existing licenses to become invalid, resulting in a reduced license count (possibly to zero).

  For more information, refer to the Rapid Deployment Pack Knowledge Base at http://www.hp.com/servers/rdp/kb (Article 136).

- If you are using Deployment Server Console security, disable it before starting the upgrade, and then re-enable it after the upgrade is complete.
- Shut down all connections to the Deployment Server Console and Deployment Server Web Console.

Rapid Deployment Pack 1.*xx* to 2.*xx* Upgrade

The ProLiant Integration Module files, directory structure, and jobs for the Deployment Server and NFS server have changed from the 1.*xx* releases. The documentation directory, containing updated 2.*xx* documentation, is the only directory overwritten during the upgrade to 2.*xx*.

For detailed information about the new directory structure and jobs, refer to the *HP ProLiant Essentials Rapid Deployment Pack—Windows Edition User Guide*. For information about removing Rapid Deployment Pack 1.*xx* components, refer to Appendix D.

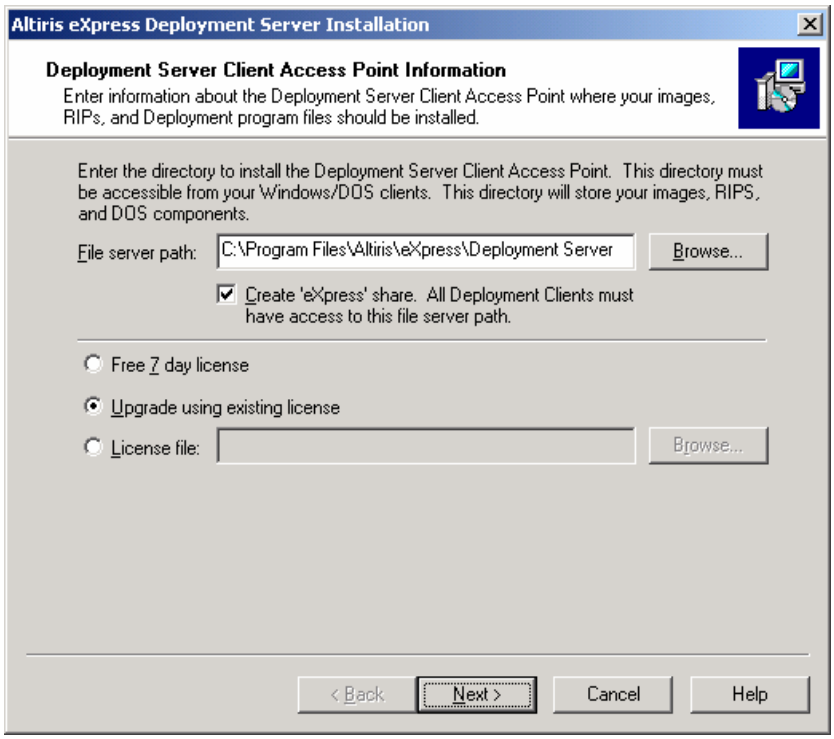
Rapid Deployment Pack 2.00 to 2.*xx* Upgrade

If you have modified any of the provided batch files, jobs, configuration files, or events, be sure you have renamed and made backup copies of this data before upgrading. The upgrade program might overwrite these files with new files.

Upgrading

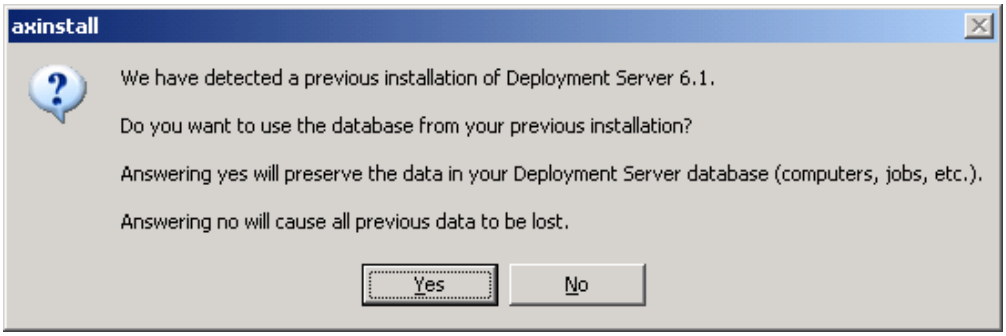
To upgrade the Rapid Deployment Pack software currently installed on the Deployment Server, refer to the instructions in Chapter 3. The Rapid Deployment Pack—Windows Edition 2.*xx* upgrade process is identical to a first-time installation, with the following exceptions:

- At the Deployment Server Client Access Point Information screen, select **Upgrade using existing license,** and click **Next.**

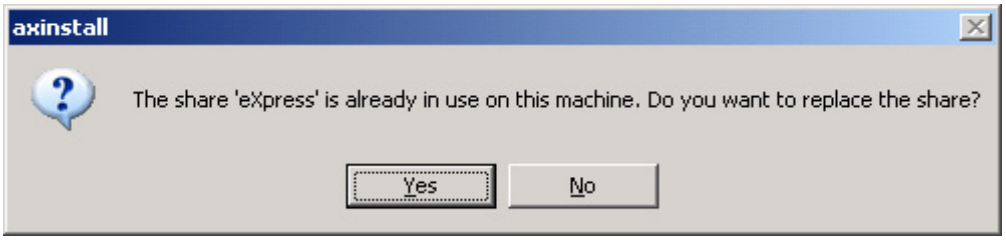


- When prompted to select if you want to use the database from the previous version of the Altiris Deployment Server, click **Yes** to keep all of the data intact.

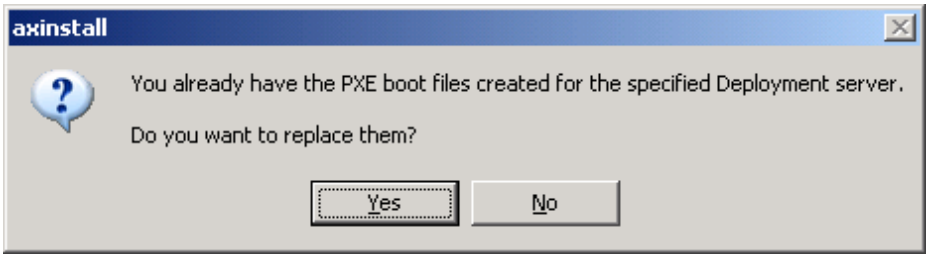
IMPORTANT: If you do not keep the existing database, all deployment history, customized jobs, and servers listed in the Deployment Server Console are lost.



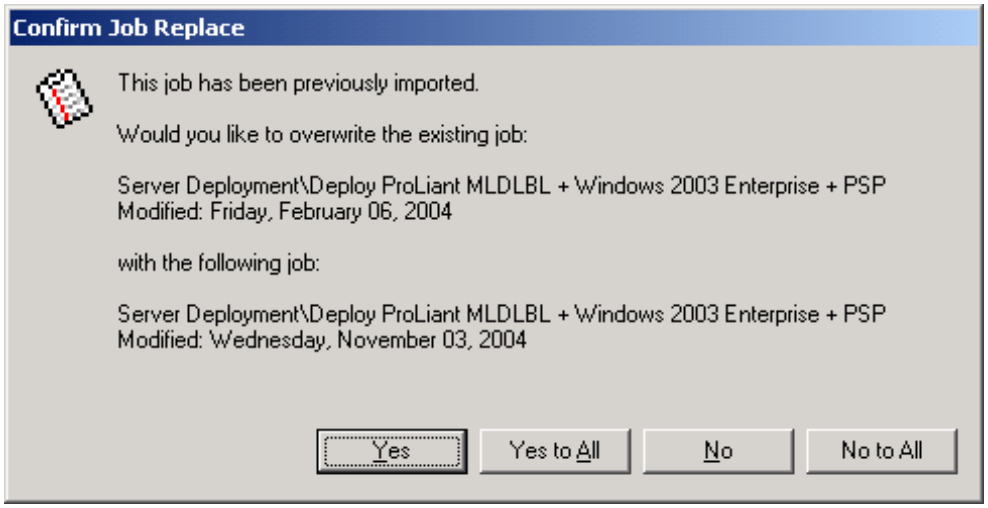
- When prompted to replace the eXpress share, click **Yes.**



- When prompted to replace the PXE boot files, click **Yes.**



- If jobs or files residing on the Deployment Server or NFS server already exist or have been modified from a previous installation of Rapid Deployment Pack 2.*xx*, you are prompted to backup or overwrite the existing files.



5

Pre-Deployment Configuration

The following sections detail the configuration steps that might be necessary to deploy an operating system to your server. Certain configuration settings that were required after a Rapid Deployment Pack 1.*xx* software installation have been incorporated into the Rapid Deployment Pack 2.*xx* installation and are therefore not included in this section.

NOTE: For information about changing the configuration settings established during the Rapid Deployment Pack 2.*xx* software installation, refer to Appendix C.

The following configuration information is provided in this chapter:

- Configuring PXE to automatically process new computers
- Configuring HP BladeSystem enclosures
- Creating physical boot diskettes for server deployment
- Windows deployments
- Linux deployments
- Packaged cluster deployments
- VMware ESX Server deployments
- Virtual machine deployments

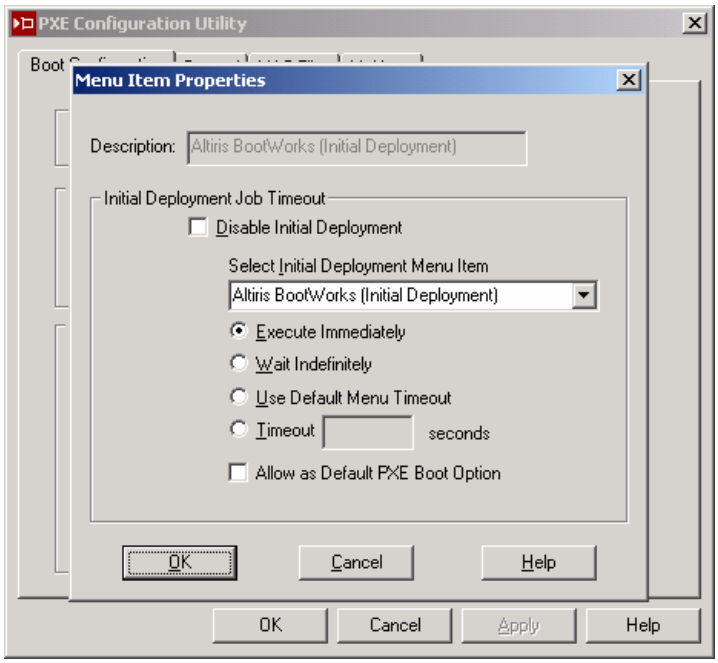
Configuring PXE to Automatically Process New Computers

By default, when a new computer (a computer not listed in the Deployment Server database) performs a PXE boot, the PXE server sends the computer the PXE menu and waits for manual selection of the Initial Deployment option. This behavior is designed for desktops and is not practical for servers, especially blade servers with no local keyboard, mouse, or display.

Complete the following steps to configure PXE to automatically select the Initial Deployment menu item and continue without user interaction. When established, this setting is persistent and does not have to be repeated after installing Rapid Deployment Pack 2.*xx* upgrade installations.

1. From the Deployment Server Console menu, select **Tools>PXE Configuration.**
2. Select the PXE server from the dropdown list, and then click **OK.**
3. Select **Altiris BootWorks (Initial Deployment)>Edit** to display the Menu Item Properties screen.

CAUTION: Do **not** reorder the boot menu located on the Menu Items list on the Boot Configuration tab. The Altiris Deployment Server selects the top menu item as the default action when there is no task for a computer to perform. Moving another selection, such as Initial Deploy, to the top of the list causes the server to never boot locally and to cycle in an endless loop of reboots.



4. Select **Execute Immediately.**
5. Click **OK** to close both windows.

Configuring HP BladeSystem Enclosures

The Physical Devices view in the Deployment Server Console displays the physical relationship among the racks, enclosures, and blade servers using the rack name and enclosure name for each HP BladeSystem server. The default name for the server rack is "UnnamedRack," and each server enclosure has a unique default enclosure name.

HP recommends setting the rack name and enclosure name before the first server in an enclosure connects to the Deployment Server. After HP BladeSystem servers are powered up for the first time and the rack and enclosure names are recorded in the Deployment Server database, the servers must be rebooted for new rack and enclosure names to be discovered. In addition, the default-named rack and enclosure must be manually deleted from the console.

When established, this option is persistent and does not have to be repeated after installing Rapid Deployment Pack 2.*xx* upgrade installations.

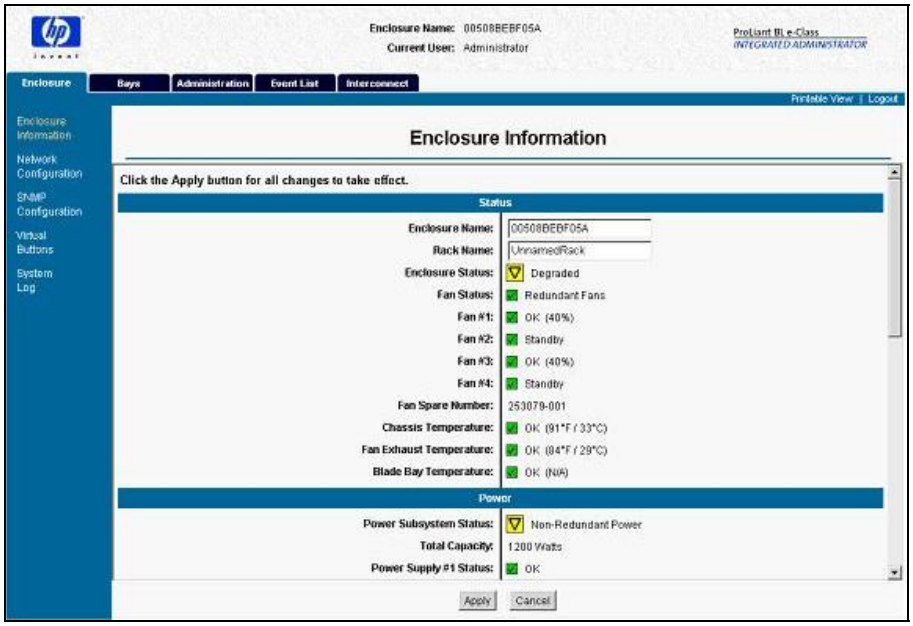
ProLiant BL e-Class Servers

To change the rack and enclosure names if the Integrated Administrator port is connected to a network with DHCP:

1. Using a Web browser, browse to the Domain Name Server (DNS) name located on the tag attached to the interconnect tray on the enclosure.
2. Log in to the Integrated Administrator using the user name and password located on the tag.

3. At the Enclosure Information screen, change the information in the Enclosure Name and Rack Name fields, and click **Apply.**

IMPORTANT: Do not use the same enclosure name for multiple enclosures. Using the same enclosure name results in multiple blade servers displayed in each bay for an enclosure and duplicate default server names.



If the Integrated Administrator port is not connected to a network with DHCP, refer to the documentation shipped with the product for details concerning how to access the Integrated Administrator using other methods, such as the serial console.

After configuring the enclosure, install the ProLiant BL e-Class servers into the enclosure by following the instructions provided with the server hardware.

For more information regarding ProLiant BL e-Class servers, refer to the documentation shipped with the product.

ProLiant BL p-Class Servers

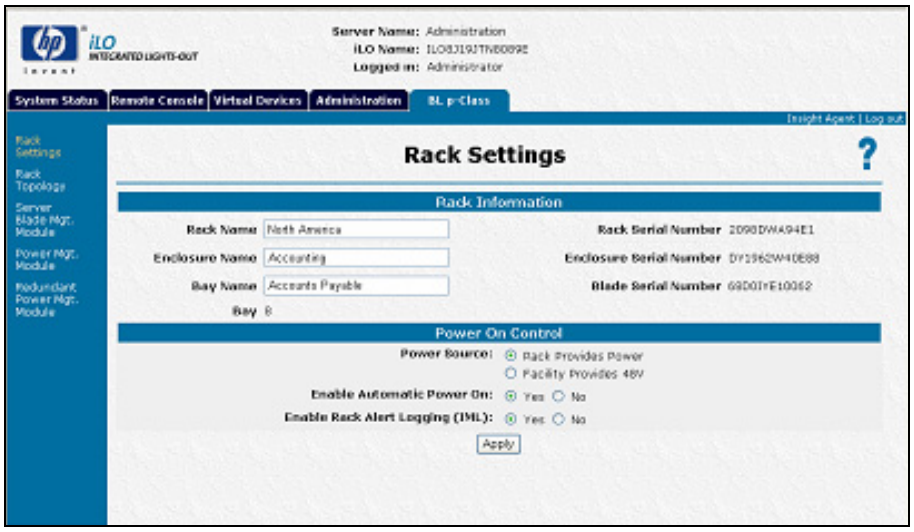
To configure all racks and the ProLiant p-Class enclosure properly, at least one blade server must be placed in each enclosure. The blade server should not be powered on until the desired rack and enclosure names are set using the Integrated Lights-Out (iLO) interface. Otherwise, the blade server will boot to PXE (if enabled), and the default rack and enclosure name will be placed in the Deployment Server database.

To change the rack and enclosure names if the iLO port is connected to the network with DHCP services available:

1. Using a Web browser, browse to the DNS name located on the tag attached to the ProLiant BL p-Class server.
2. Log on to iLO using the credentials on the tag.

   NOTE: Users that do not have the Administrator ProLiant BL p-Class privilege can only view the settings.

3. Click the **BL p-Class** tab.
4. At the Rack Settings screen, change the information in the Rack Name and Enclosure Name fields.



IMPORTANT: Do not use the same enclosure name for multiple enclosures. Using the same enclosure name results in multiple blade servers displayed in each bay for an enclosure and duplicate default server names.

5. Click **Apply.**
6. Log out, and log back on to iLO.

For more information regarding iLO, refer to the documentation shipped with the product.

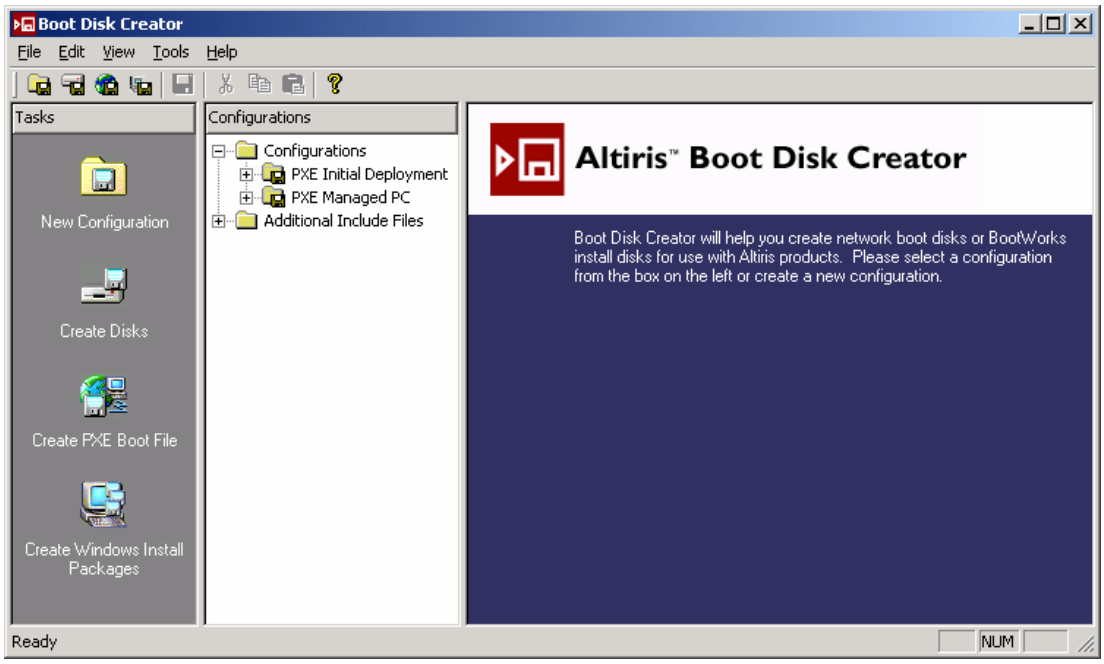
If the iLO port is not connected to a network with DHCP services available, refer to the documentation provided with your blade server for details about accessing iLO from the front panel of the blade server.

Creating Physical Boot Diskettes for Server Deployment

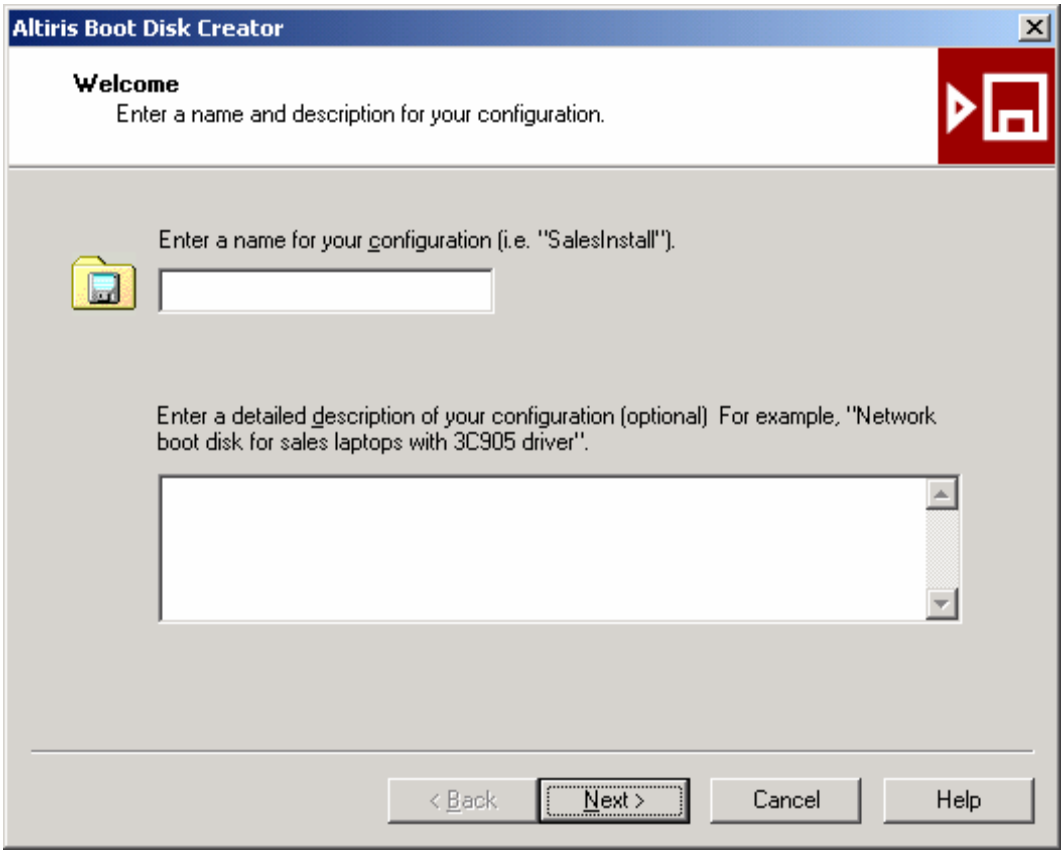
If PXE will not be used in the deployment infrastructure, one or more physical boot diskettes must be created to enable the target servers to communicate with the Deployment Server.

To create an MS-DOS boot diskette using the Altiris Boot Disk Creator after each Rapid Deployment Pack installation and upgrade:

1. At the Deployment Server Console, select **Tools>Boot Disk Creator.**
   The Boot Disk Creator application appears.

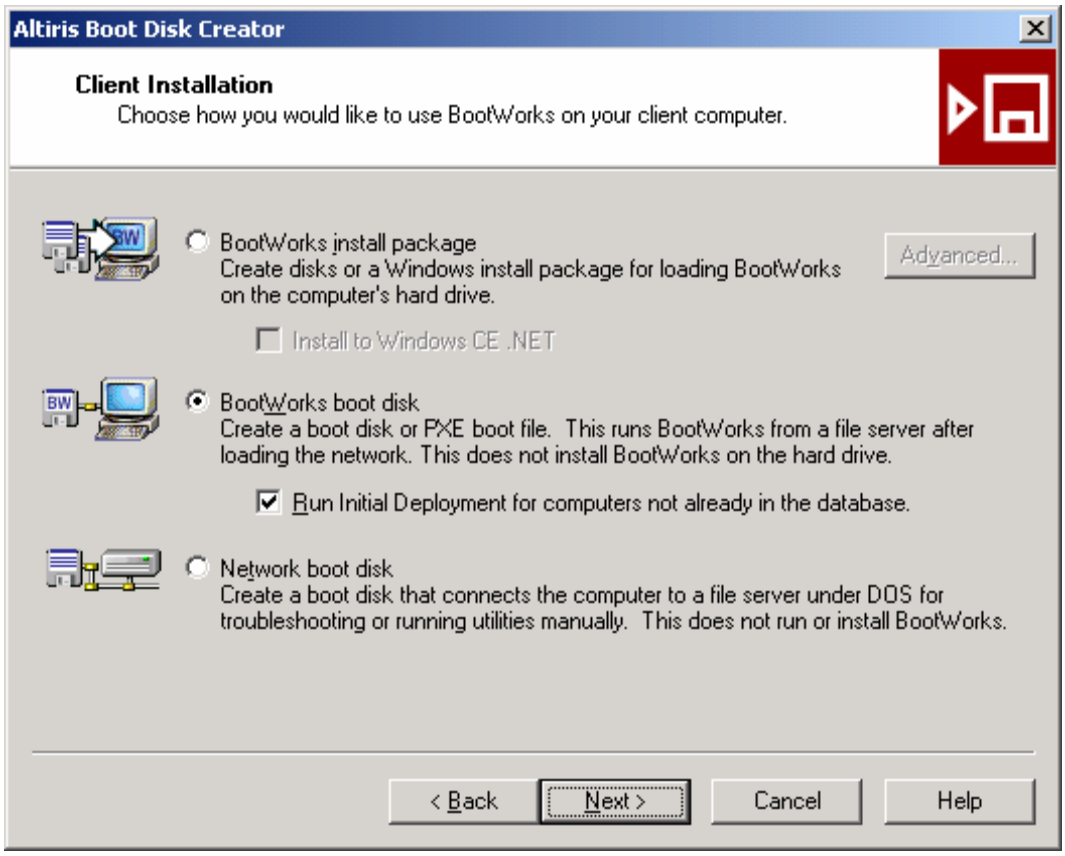


2. Click the **New Configuration** icon in the Tasks pane on the left. Enter a name for the configuration, such as DOS Boot Disk, and a description, and then click **Next.**

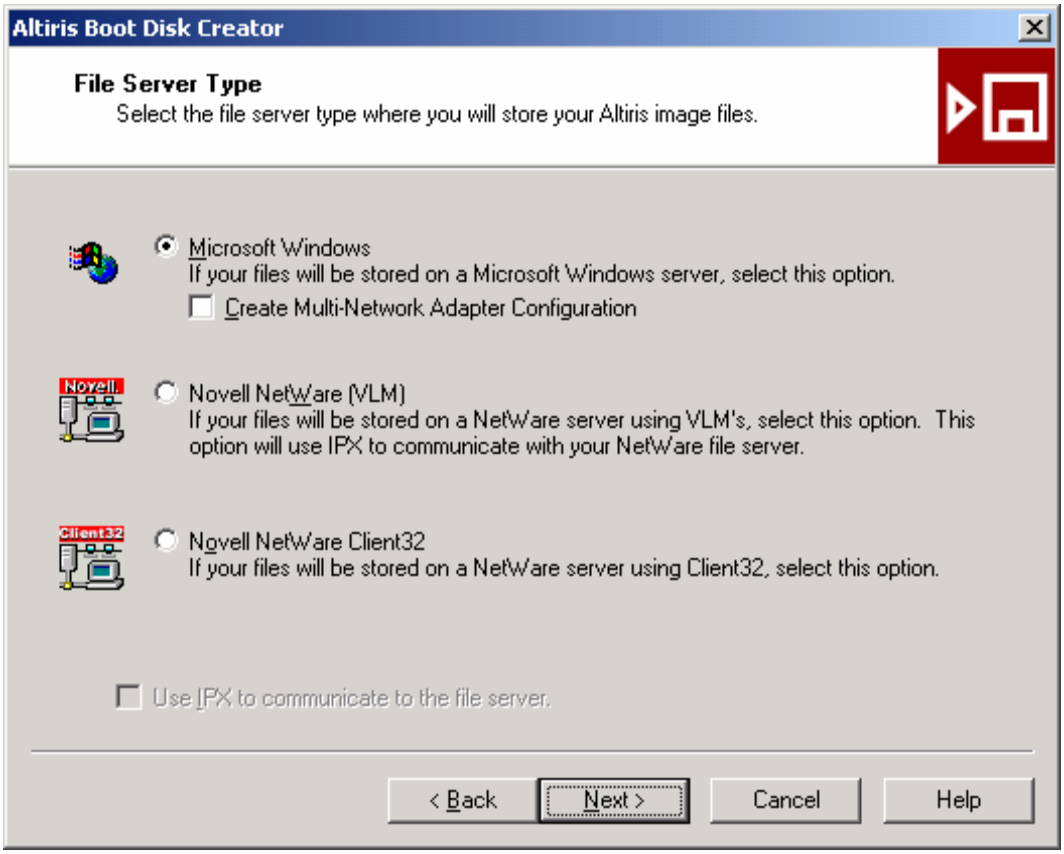


3. Select **BootWorks boot disk** from the available choices, select the **Run Initial Deployment for computers not already in the database** checkbox, and then click **Next.**

NOTE: The Initial Deployment selection can be used on boot diskettes even when the computer is a managed computer. Initial Deployment only runs the first time a computer appears in the Deployment Server Console.



4. Click **Next** to accept the default selection of Microsoft Windows.

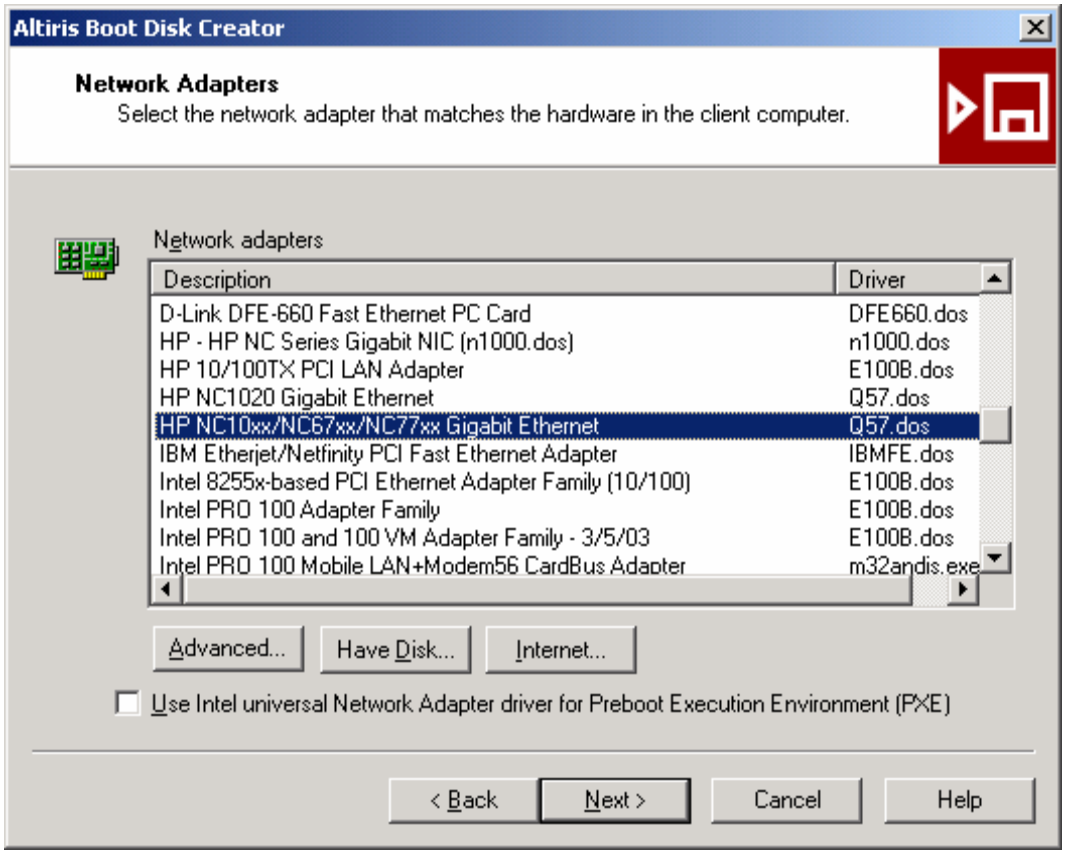


5. Select the appropriate driver for the target server NIC:

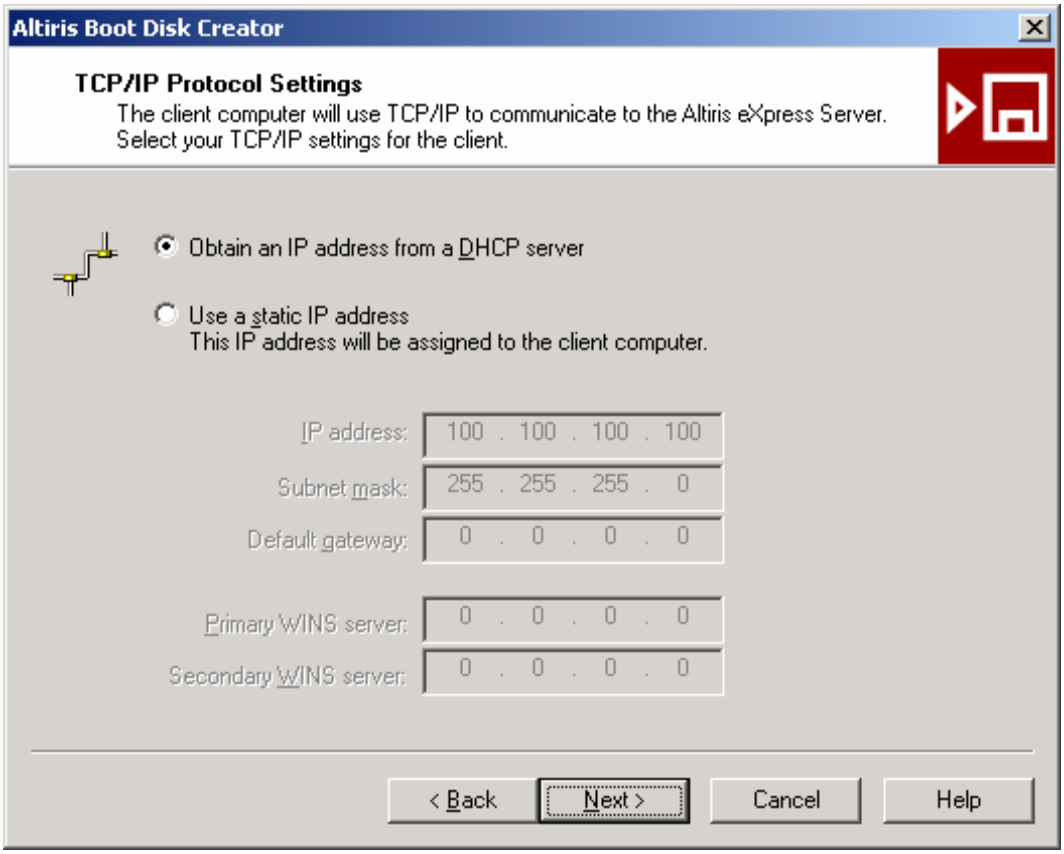
   - For ProLiant servers with Intel-based Gigabit NICs, select **HP NC Series Gigabit NIC (n1000.dos).**
   - For ProLiant servers with Intel 10/100 NICs, select **HP 10/100TX PCI LAN Adapter.**
   - For ProLiant DL 100-series Broadcom-based servers, select **Broadcom NetXtreme Gigabit Ethernet.**
   - For the HP bc1000 blade PC, select **Broadcom NetXtreme Ethernet (for HP BC 1000 blades).**
   - For other ProLiant servers with Broadcom-based NICs, select **HP NC10xx/NC67xx/NC77xx Gigabit Ethernet.**

   NOTE: Be sure the **Use Intel universal Network Adapter driver for Preboot Execution Environment (PXE)** checkbox is not selected.

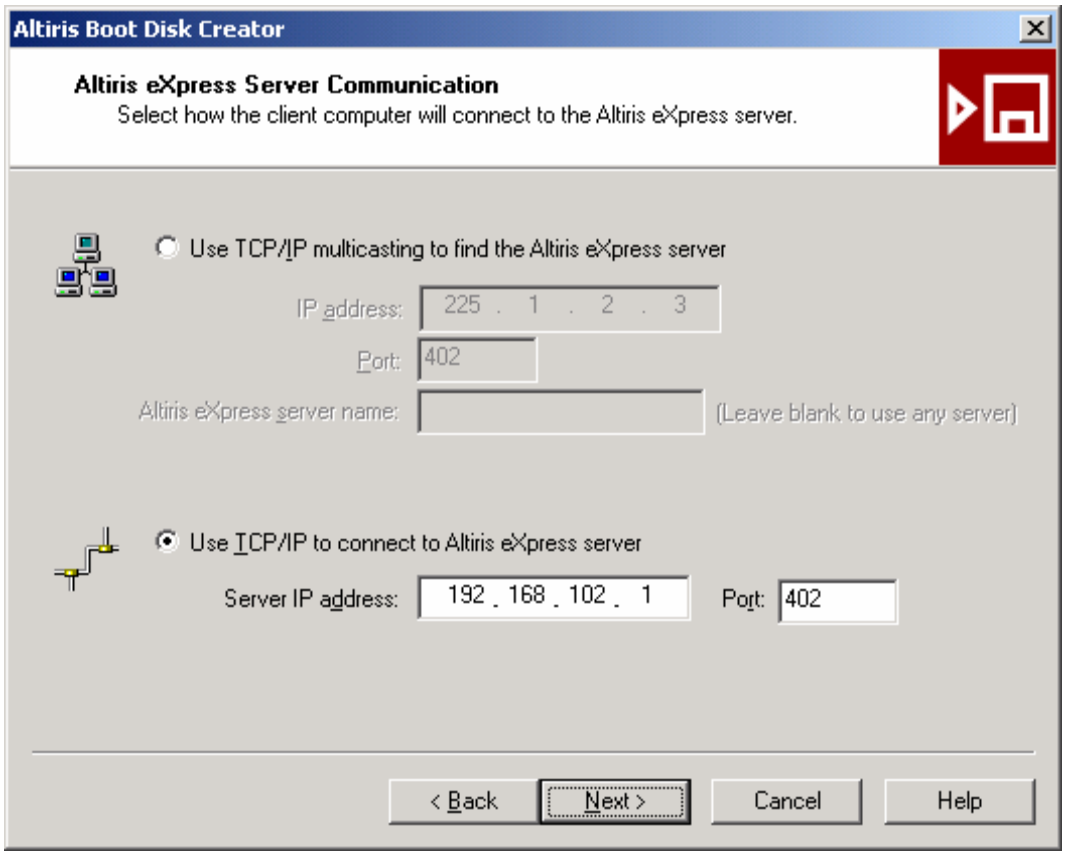
6. Click **Next.**



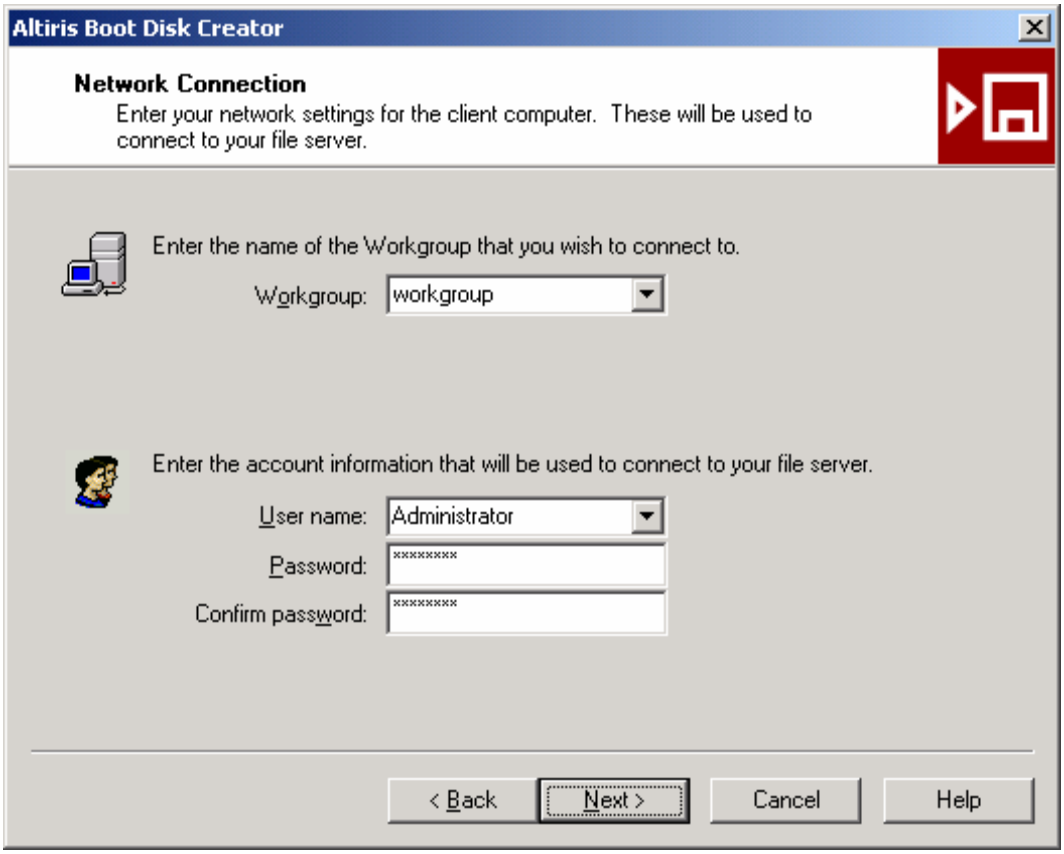
7. If static IP addresses are required, enter the appropriate information, and then click **Next.**



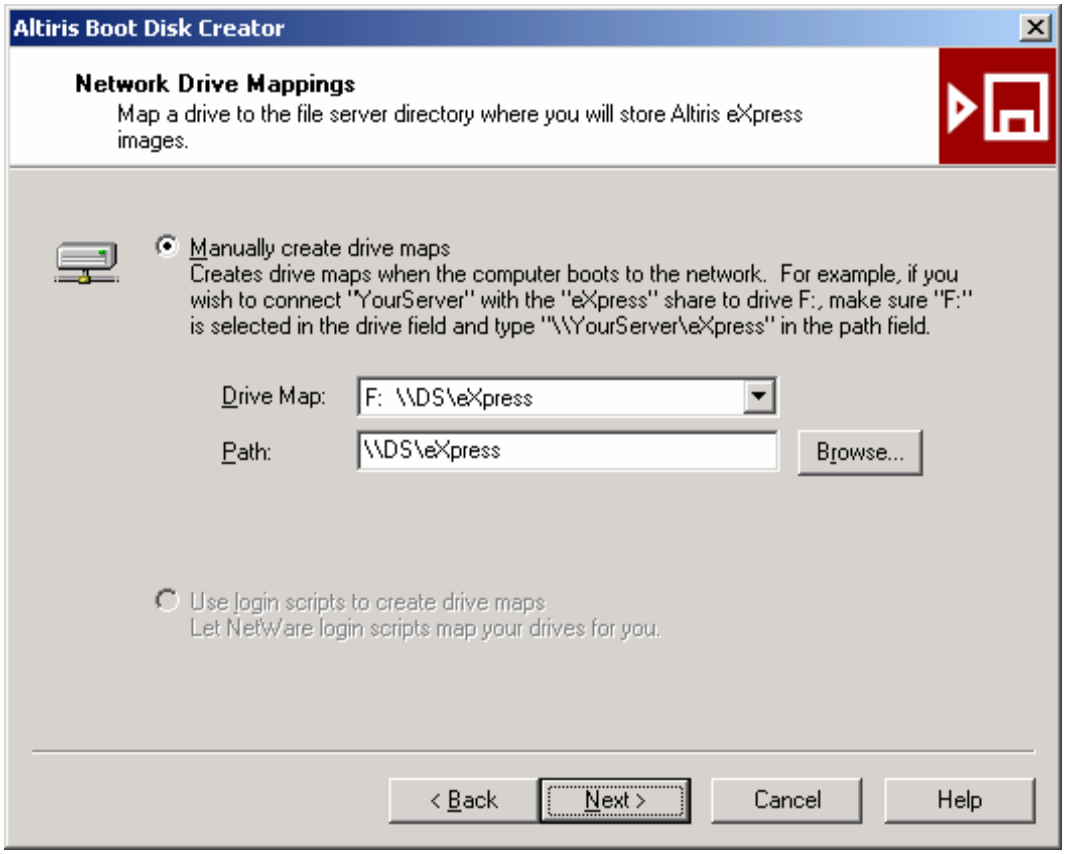
8. In the Use TCP/IP to connect to Altiris eXpress server field, verify the Server IP address setting reflects the IP address of your Deployment Server, and then click **Next.**



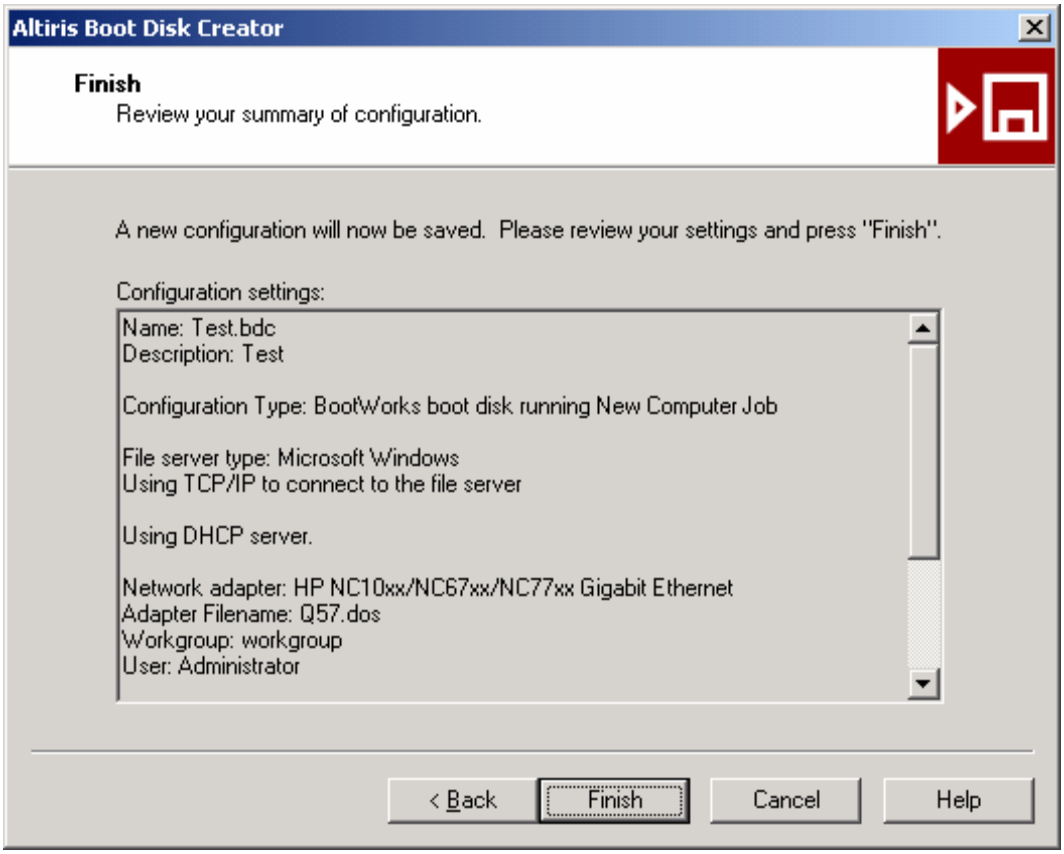
9. Click **Next** to accept the default workgroup name and login account settings.



10. Click **Next** to accept the default drive mappings settings.

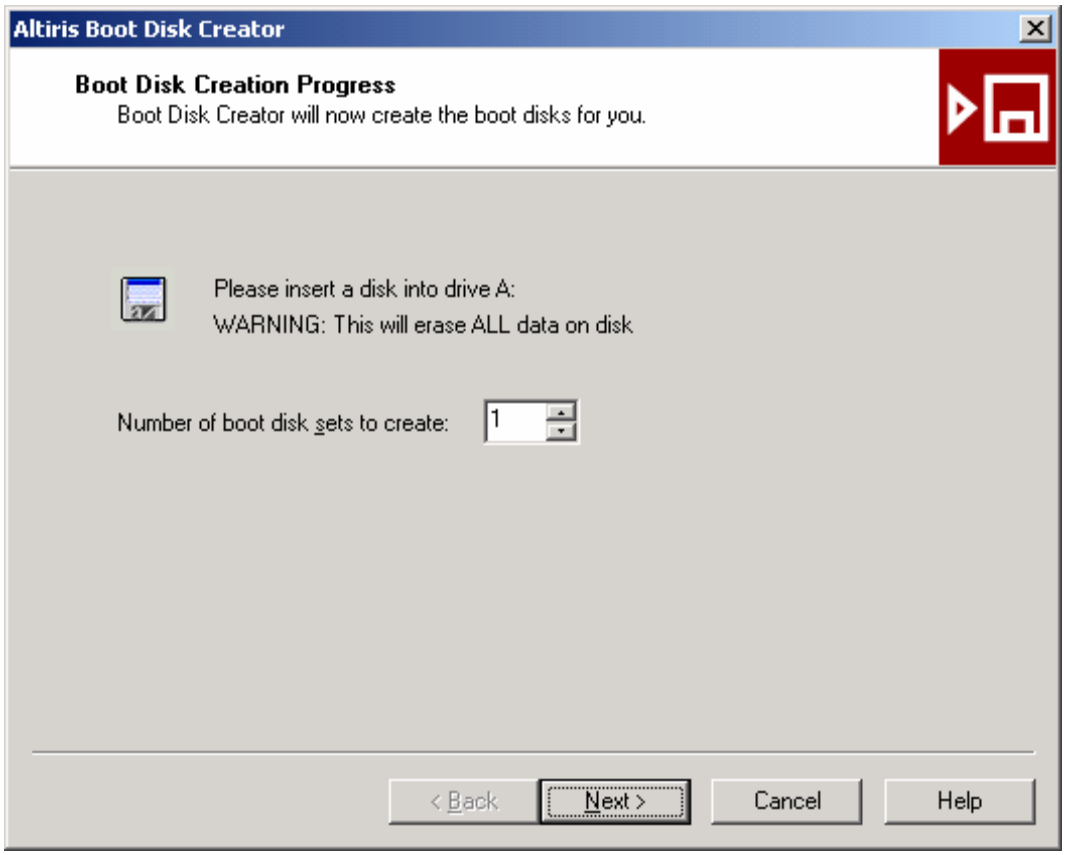


11. Click **Finish** to create the configuration.

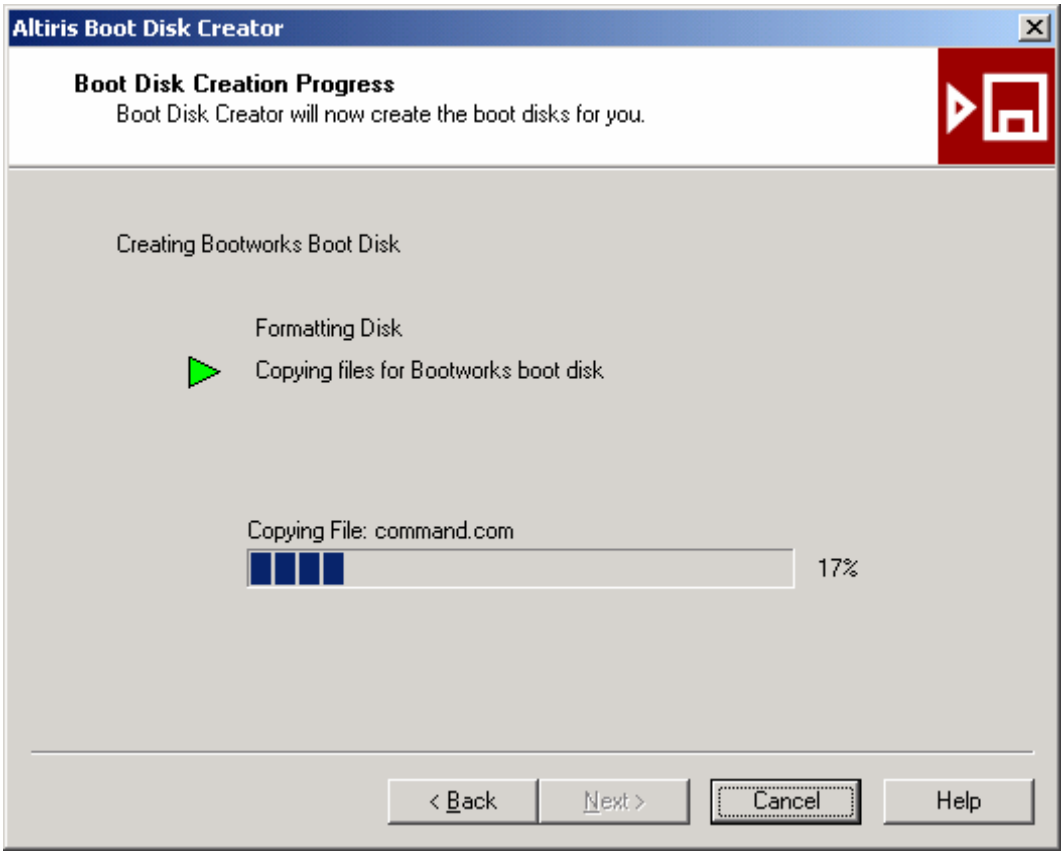


12. When prompted to select a media type, select **Create floppy disk sets,** and click **OK.**

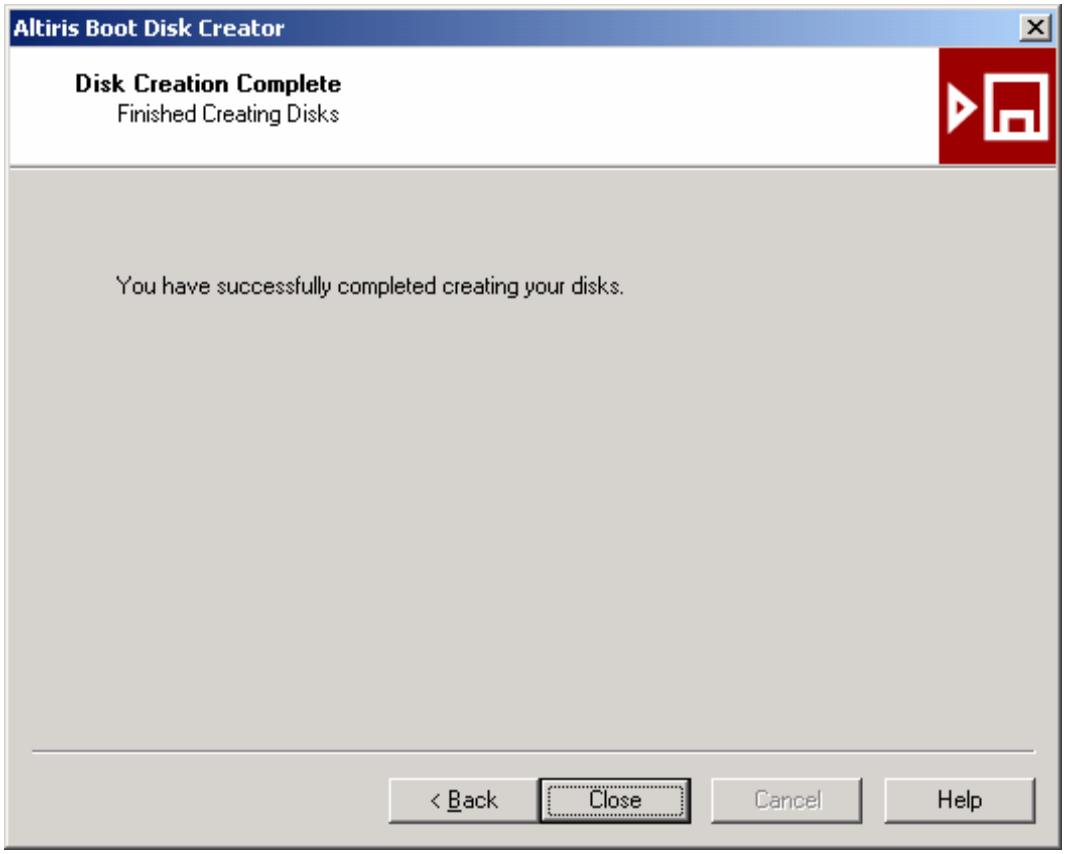
13. Insert a diskette into the diskette drive, select the number of boot disk sets to create, and then click **Next.**



The Boot Disk Creator begins creating the disks.



14. When the diskettes are complete, click **Close.**



Windows Deployments

The following configuration steps might be necessary to support Windows scripted install jobs.

1. If necessary, modify the Windows unattend text file located on the Deployment Server at .\lib\osconfig*yyyy*, where *yyyy* is the Windows operating system shortcut name, with settings that align with your environment. Suggested settings to change are:

   — Product ID/Key

   — Domain

   — Administrator password

   — SNMP community string and trap destinations

   For more information about editing a Windows scripted install unattend text file, refer to the Windows 2000 online resource kit at http://www.microsoft.com./windows2000/techinfo/reskit/en-us/default.asp.

   NOTE: Because the unattend text file is used by multiple servers, use a Windows Volume License Key and media that contains multiple or unlimited activations.

2. If necessary, modify the Deployment Agent for Windows (AClient) settings by selecting **Tools>Options** from the Deployment Server console. Click the **Agent Settings** tab, select **Force new agents to take these default settings**, and click **Change Default Settings**. HP recommends the following setting:

   a. Click the **Other** tab:

      — Select **Force applications to close when shutting down.**

      — Select **Synchronize this system's date/time with the Deployment Server.**

   b. Click the **BootWorks** tab:

      — In the **Select when (or if) you would like to be prompted for a BootWorks boot disk when performing tasks from DOS** field, select **Never prompt me.**

   If you must change the settings with which AClient is installed, modify .\lib\osoem\altiris\aclient.txt.

The following step must be performed before deploying each server.

3. Before executing a Windows scripted install job, verify the computer name in the Deployment Server console is NETBIOS compliant and the right-most 15 characters are unique. Windows scripted installs perform a token-replace of the computer name from the Deployment Server Console. The computer name is truncated to the 15 right-most characters to comply with NETBIOS limitations.

   IMPORTANT: For Windows jobs deployed on VMware ESX Server virtual machines, you must remove the spaces from the computer name.

Linux Deployments

The following configuration step is required to support Linux scripted install jobs. It is only necessary to perform this step one time.

To complete Red Hat Enterprise Linux 3 Update 4 for AMD64 and Intel EM64T scripted install jobs, the operating system must be able to perform a reverse name lookup to start the operating system installation over a network. Verify that a DNS entry is set up with the DHCP server or a DNS server is available in the network.

Packaged Cluster Deployments

The following configuration steps are required to support packaged cluster scripted install jobs.

1. To prevent being prompted for domain credentials when adding computers to a domain, add a domain account to the Deployment Server. In the Deployment Server Console:
   a. Open the Program Options dialog box.
   b. Select **Tools>Options.**
   c. Click the **Domain Accounts** tab, and click **Add.**
   d. Enter the appropriate domain, user name, and password with rights to add computers to the domain.
2. For each of the following packaged cluster deployment jobs, add the domain name that each node is to join.
   — Server Deployment\Deploy ProLiant DL380 G*x* Packaged Cluster + Windows 2000 Advanced Server + PSP
   — Server Deployment\Deploy ProLiant DL380 G*x* Packaged Cluster + Windows 2003 Enterprise + PSP
   a. Open the Job Properties window for the packaged cluster deployment job.
   b. Scroll to the **Modify Configuration** task, and click **Modify.**
   c. Select **Microsoft Networking.**
   d. Select **Domain,** and enter a domain name.
   e. Click **Finish.**
   f. Repeat steps a through e for each packaged cluster deployment job.

3. For each of the following packaged cluster deployment jobs, add the domain administrator credentials that will be used to create or join the cluster from each node.
   - — Server Deployment\Deploy ProLiant DL380 G*x* Packaged Cluster + Windows 2000 Advanced Server + PSP
   - — Server Deployment\Deploy ProLiant DL380 G*x* Packaged Cluster + Windows 2003 Enterprise + PSP
   - — Server Deployment Toolbox\3 - Post-OS Configuration\Create/Join ProLiant DL380 G*x* Packaged Cluster

   a. Open the Job Properties window for the packaged cluster deployment job.

   b. Scroll to the **Run Script - Create/Join Cluster** task, and click **Modify.**

   c. Click **Advanced.**

   d. In the Security Context area, select **Enter user name and password,** and supply the domain, user name, and password valid in the domain for the cluster.

   e. Click **OK** to close the window, and then click **Finish** to close the Script Properties window.

   f. Click **OK** to close the Job Properties window.

   g. Repeat steps a through f for each packaged cluster deployment job.

The following steps must be performed before deploying each packaged cluster.

4. On the Deployment Server, copy and rename the clustername.ini file in the .\lib\clconfig directory.

   IMPORTANT: A unique cluster configuration file must be created for each packaged cluster to be deployed. This file must have the same name as the computer group that represents the packaged cluster being deployed and must be a NETBIOS compliant name.

5. Edit the new file in a text editor.

   a. If the provided crossover cable is not used to connect the private network on each node, specify a unique IP addresses for the private NIC of each node. Change:

      ```
      set IPADDRESSPRIVATE#=1.1.1.1
      ```

      to:

      ```
      set IPADDRESSPRIVATE#=x.x.x.x
      ```

      where *#* represents the node and *x.x.x.x* is a unique IP address.

   b. Modify the following lines to specify domain administrator credentials under which the cluster service will run:

      ```
      set account=administrator
      set password=password
      ```

      IMPORTANT: Microsoft Cluster Services requires a domain administrator account to run the cluster service. This password is stored in plain text in the cluster configuration file on the Deployment Server.

c. Modify the following line to specify the domain to which the cluster will belong:

```
set domain=RDP
```

d. Modify the following line to specify the cluster name:

```
set name=RDPCLUSTER
```

NOTE: HP recommends matching the cluster name and configuration file.

e. Modify the following lines to specify the IP address and subnet mask of the cluster:

```
set ipaddr=0.0.0.0
set subnet=255.255.0.0
```

f. Save and close the file.

6. Create a new computer group with the cluster nodes.

a. Right-click in the Computers pane, and select **New Group.**

b. Rename this group to the name of the cluster.

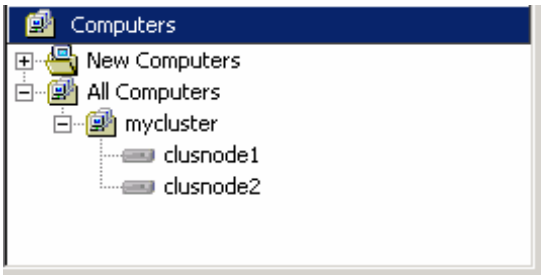
IMPORTANT: The name of the group must match the name of the cluster configuration file created in step 4.

c. Power on the shared storage.

d. Power on the cluster nodes. The nodes will PXE boot and appear in the Computers pane under **New Computers.**

e. Modify the display name for each node.

f. Drag the nodes from the **New Computers** group to the newly created group. For example, the following figure displays a cluster group called “mycluster” with the nodes “clusnode1” and “clusnode2.”



VMware ESX Server Deployments

The following configuration steps are required to support VMware ESX Server scripted install jobs. It is only necessary to perform these steps one time.

1. Create a virtual directory named "ds" mapped to the Deployment Server installation directory. The default Altiris Deployment Server directory is C:\Program Files\Altiris\eXpress\Deployment Server.
2. Enable the **Allow anonymous connections** setting for the FTP site.

Virtual Machine Deployments

The following configuration steps are required to support virtual machine scripted install jobs.

NOTE: For details about accessing the VMware Management Interface, initializing VMware, and creating virtual machines, refer to the VMware documentation.

1. VMware ESX Server must be installed on a server. The provided deployment job can be used to perform a scripted install of VMware ESX Server on supported ProLiant servers. For supported VMware ESX Server versions and ProLiant servers, refer to the *HP ProLiant Essentials Rapid Deployment Pack—Windows Edition Support Matrix* for your Rapid Deployment Pack version.
2. After VMware ESX Server is installed on a server, browse to the VMware Management Interface at http://*hostname* or http://*xxx.xxx.xxx.xxx*, where *hostname* is the fully qualified domain name or *xxx.xxx.xxx.xxx* is the IP address of the server on which VMware ESX Server is installed.
3. Log in to the VMware Management Interface with the root account.

   IMPORTANT: If VMware was installed using a Rapid Deployment Pack scripted installation, the default root password is "password."

4. Select **Options>Licensing and Serial Numbers.**
5. Read the license agreement. If you agree to the terms of the license agreement, click **Agree.**
6. Enter the appropriate VMware serial numbers.
7. Reboot the VMware ESX Server when prompted.
8. Complete the configuration for swap space and the Ethernet switch.

The following steps must be performed before deploying each virtual machine.

9. Create a new virtual machine, ensuring that the guest operating system is appropriate for the operating system you plan to install on the virtual machine.

   IMPORTANT: For a SUSE LINUX installation, a minimum of 256 MB RAM must be installed.

10. Power on the virtual machine.

11. At the VMware Remote Console, press the **F2** key to access the BIOS.
12. Set the network adapter first in the boot order, allowing the virtual machine to PXE-boot during the scripted installs.
13. Save the virtual machine BIOS settings, and reboot the virtual machine. The virtual machine appears in the Deployment Server Console as a new computer.
14. If performing a Windows scripted install on the virtual machine, modify the Deployment Server Console name to a NETBIOS compliant name without spaces. The Windows scripted installs perform a token-replace of the computer name from the Deployment Server Console, which truncates the name to the 15 right-most characters to abide by NETBIOS limitations.

IMPORTANT: Install Linux or Windows on each virtual machine using the jobs provided in the (VM) from Server Deployment Toolbox / 2B – OS Installation (Scripted) job folder. For example, run the “Deploy Windows 2000 Advanced Server (VM)” job to install Windows 2000 Advanced Server on a virtual machine.

A

Manually Installing Windows and VMware Operating System CDs

If you did not copy the Windows or VMware operating system CDs during the installation, manually copy the files for each omitted operating system to ensure that the provided Windows and VMware jobs operate properly. The provided scripted install jobs rely on the existence of operating system files at .\lib\osdist*yyy*\i386 and .\lib\osdist*yyy* for Windows and VMware respectively, where *yyy* indicates the operating system shortcut name.

NOTE: Manually copying the Windows or VMware operating system files using the following steps produces the same results as copying the files when prompted during the Rapid Deployment Pack installation.

To manually copy the operating system files to the Deployment Server directory:

1. Locate the appropriate .\lib\osdist directory on the Deployment Server.
2. Select the appropriate directory for the operating system files to be copied.

Table A-1: Operating System Directory Names

Operating System	Directory Name
Windows 2000 Server	w50s
Windows 2000 Advanced Server	w50as
Windows Server 2003, Standard Edition	w52s
Windows Server 2003, Enterprise Edition	w52e
Windows Server 2003, Web Edition	w52w
VMware ESX Server 2.5	vmesx25

3. For Windows, copy the i386 directory from the operating system CD to the operating system directory.

   For VMware, copy the entire contents of the operating system CD to the operating system directory.

B

Manually Installing Linux Distribution CDs

If you did not copy Linux distribution CDs to the Linux NFS server during the Rapid Deployment Pack installation, manually copy the files for each omitted distribution to ensure that the provided Linux jobs operate properly. The provided Linux scripted install jobs rely on the existence of distribution files at /usr/rdp/osdist/*yyyy,* where *yyyy* indicates the distribution shortcut name.

IMPORTANT: The ProLiant Integration Module installation on the NFS server verifies that the Linux distribution source files are the supported version and/or update for the specific Rapid Deployment Pack release. When the source files are manually copied to the NFS server, this key check is not performed. To confirm that you are using a supported version/update of Linux, refer to the *HP ProLiant Essentials Rapid Deployment Pack—Windows Edition Support Matrix* for your Rapid Deployment Pack version.

NOTE: SUSE LINUX distribution CDs cannot be manually copied to the NFS server. These files must be copied during the ProLiant Integration Module installation on the NFS server.

To manually copy the Linux distribution files to the NFS server directory:

1. Locate the /usr/rdp/osdist directory on the NFS server.
2. Select the appropriate directory for the distribution files to be copied.

Table B-1: Distribution Directory Names

Distribution	Directory Name
Red Hat Enterprise Linux AS 2.1 Update 6 for x86	rhas21u6
Red Hat Enterprise Linux ES 2.1 Update 6 for x86	rhes21u6
Red Hat Enterprise Linux AS 3 Update 4 for x86	rhas3u4
Red Hat Enterprise Linux ES 3 Update 4 for x86	rhes3u4
Red Hat Enterprise Linux AS 3 Update 4 for AMD64 and Intel EM64T	rhas3u4.64
Red Hat Enterprise Linux ES 3 Update 4 for AMD64 and Intel EM64T	rhes3u4.64

3. Insert the first distribution CD into the NFS server CD-ROM drive.

   NOTE: As an alternative to using physical CDs, you can mount the Linux distribution ISO files and copy the Linux files from that mount location. Another alternative is placing the Red Hat Linux ISO files in the distribution directory instead of the Linux files. For more information about using Red Hat Linux ISO images, refer to the Rapid Deployment Pack Knowledge Base at http://www.hp.com/servers/rdp/kb (Article 96).

4. Mount the CD-ROM drive:

   ```
   mount /mnt/cdrom (Red Hat Linux)
   or
   mount /media/cdrom (SUSE LINUX)
   ```

5. Copy the contents of the distribution CD, including subdirectories, to the distribution directory. For example:

   ```
   cp -r  /mnt/cdrom/* /usr/rdp/osdist/rhas3u4
   ```

6. Unmount the CD-ROM drive:

   ```
   umount /mnt/cdrom (Red Hat Linux)
   or
   umount /media/cdrom (SUSE LINUX)
   ```

7. Repeat steps 3 through 6 to copy the remaining CDs in the distribution set to the distribution directory.

   For Red Hat Linux, the distribution CDs containing the RedHat/RPMS directory and the RedHat/Updates directory, if applicable, are required. However, all distribution CDs in the set might not be needed.

C

Manually Modifying Configuration Settings

Deployment Server Configuration

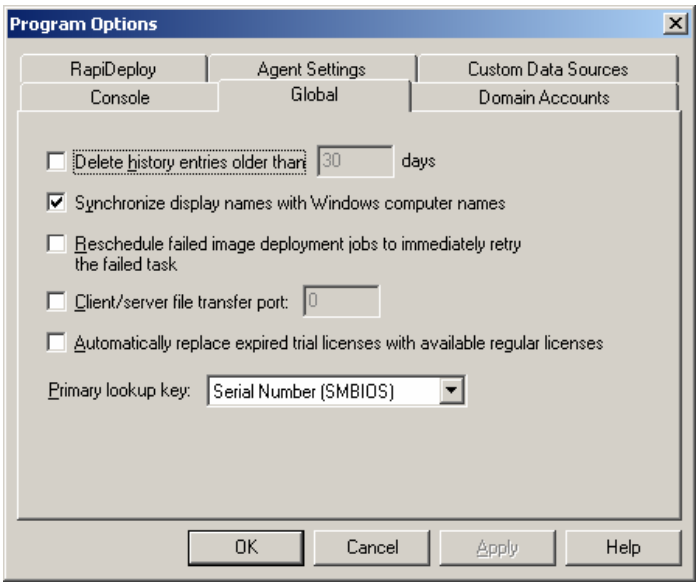
Refer to the following sections to modify configuration settings for the Deployment Server.

Synchronizing the Deployment Server Console Name with the Windows Name

The Deployment Server can use a console display name that is different from the actual computer name. However, you can select to have the console always reflect the same name as the computer name. This option can be enabled during the Rapid Deployment Pack installation by selecting the **Enable synchronizing the console display name with the server name** checkbox at the Configuration Options window.

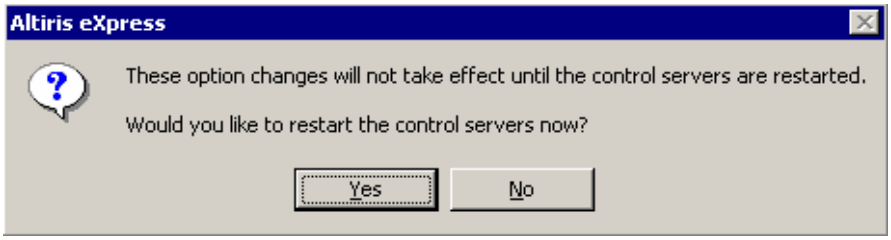
To enable synchronization of the Deployment Server Console and operating system names after the Rapid Deployment Pack installation:

1. Select **Tools>Options** from the Deployment Server Console.
2. Click the **Global** tab from the Program Options window.



3. Select the **Synchronize display names with Windows computer names** checkbox, and click **OK.**

4. Click **Yes** when prompted to restart the control servers.



Modifying the Primary Lookup Key

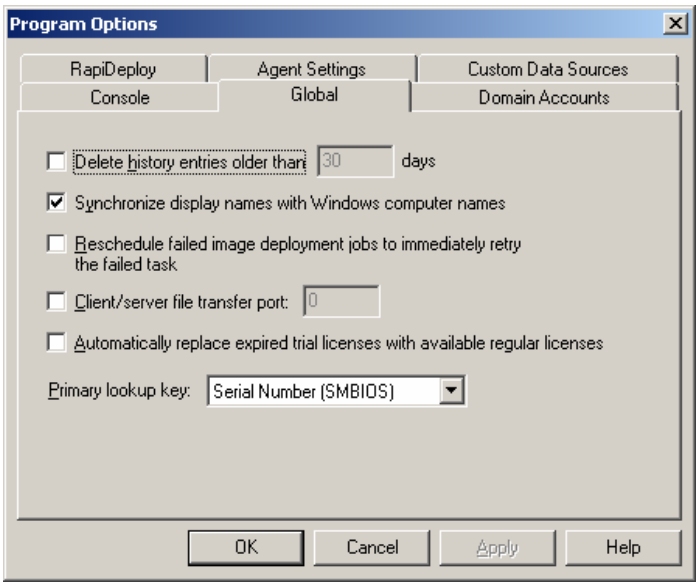
The Deployment Server uses the primary lookup key to determine if a server is already in the database. HP recommends setting the primary lookup key as the server serial number. Setting the primary lookup key as the server serial number has two benefits:

- It enables servers to be imported by their serial number, rather than keys that are more difficult to determine, such as the MAC address.
- It prevents duplicate database entries from occurring when servers have two or more NICs.

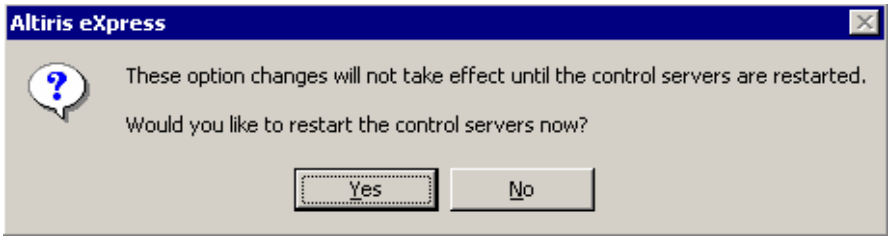
The primary lookup key can be set as the server serial number during the Rapid Deployment Pack installation by selecting the **Set the primary lookup key to "Serial Number"** checkbox at the Configuration Options window.

To set the primary lookup key as the server serial number after the Rapid Deployment Pack installation:

1. At the Deployment Server Console, select **Tools>Options.**
2. At the Program Options window, click the **Global** tab.



3. From the Primary lookup key dropdown list, scroll up and select **Serial Number (SMBIOS).**
4. Click **OK.**
5. Click **Yes** when prompted to restart the control servers.



VMware Deployments

For the VMware scripted install jobs to operate properly, the IP address of the Deployment Server must be specified within the kickstart files. If VMware is selected during the ProLiant Integration Module installation, the kickstart files are updated automatically with the Deployment Server IP address.

However, if you must update the kickstart files with the Deployment Server IP address after the installation, either run the Rapid Deployment Pack installation again, selecting VMware during the ProLiant Integration Module installation, or manually edit the VMware kickstart files.

To manually edit the VMware kickstart files with the Deployment Server IP address:

1. On the Deployment Server, locate the VMware kickstart files at .\lib\osconfig\vmesx*yy*, where *yy* is the VMware ESX Server version.
2. Using a text editor, edit each kickstart file (.cfg extension) as indicated, substituting your Deployment Server IP address for `0.0.0.0`:
   a. Modify the operating system line:

      ```
      url --url ftp://anonymous:rdp@0.0.0.0/ds/lib/osdist/vmesx25
      ```

   b. Modify the ftp open command line:

      ```
      open 0.0.0.0
      ```

IMPORTANT: A non-Windows text editor must be used in modifying the VMware kickstart files, so as not to corrupt the files with additional characters causing the scripted install to not work properly.

Linux Deployments

For the Linux scripted install jobs to operate properly, the IP address of the NFS server on which the installation files are located must be specified. The IP address of the NFS server is a variable within each Linux scripted install job referencing the user_tokens table in the database. The IP address must be specified during the Rapid Deployment Pack installation by entering the NFS server IP address at the Configuration Options windows.

To update the IP address, either run the Rapid Deployment Pack installation again, specifying the new IP address, modify the user_tokens table, or update each job to specifically point to an NFS server.

To update each Linux scripted install job to specifically point to a NFS server:

1. Locate the Linux scripted install job to be modified within the Deployment Server Console. Expand the tree view, if necessary, to view the job in the Jobs pane.
2. Copy and rename the job.
3. Double-click the newly created job. The Job Properties screen appears.
4. Double-click the **Run Script—Create Boot Environment** task.

5. Locate the following line in the script:

   ```
   set nfsserver=%rdpnfsserveripaddress%
   ```

6. Change `%rdpnfsserveripaddress%` to the IP address NFS server as follows:

   ```
   set nfsserver=xxx.xxx.xxx.xxx
   ```

   where *xxx.xxx.xxx.xxx* is the fixed IP address of the NFS server.

7. Click **Finish** to save changes.
8. Repeat steps 1 through 7 for any additional Linux scripted install jobs to be modified.

D

Removing Rapid Deployment Pack 1.xx Provided Jobs and Files

An upgrade to Rapid Deployment Pack—Windows Edition 2.*xx* provides new jobs, as well as a new directory structure and files for both the Deployment Server and NFS server. Only the documentation directory on the Deployment Server is overwritten with new information. All Rapid Deployment Pack 1.*xx* data is retained after a 2.*xx* upgrade.

The information in this section provides instructions to remove the RDP-WE 1.*xx* data. This information is also helpful if you want to transfer your 1.*xx* customized files into the new directory structure.

IMPORTANT: Rapid Deployment Pack 1.*xx* jobs are structured differently and cannot be easily modified to use the new directory architecture.

For detailed information about the provided jobs, directory structure, and files, refer to the *HP ProLiant Essentials Rapid Deployment Pack—Windows Edition User Guide* for your specific Rapid Deployment Pack version.

Job Structure

A Rapid Deployment Pack 2.*xx* upgrade places the new provided jobs in the following three job folders:

- Server Deployment
- Server Deployment Toolbox
- Server Replication

Rapid Deployment Pack 1.*xx* jobs are not overwritten or removed during the 2.*xx* upgrade. To remove the Rapid Deployment Pack 1.*xx* jobs, within the jobs pane:

CAUTION: Deleted job folders and jobs cannot be restored. Rapid Deployment Pack 1.*xx* must be reinstalled to restore Rapid Deployment Pack 1.*xx* jobs.

1. Right-click the ***OSName*** **Scripted Install Events** job folder, where *OSName* is the full name of the Windows or Linux operating system, and select **Delete.**
2. Click **Yes** when prompted to confirm the action. The job folder and all jobs within that folder are deleted.

3. Repeat steps 1 and 2 to delete all Rapid Deployment Pack 1.*xx* scripted install jobs for all operating systems.
4. Right-click the **SmartStart Toolkit and OS Imaging Events** job folder, and select **Delete.**
5. Click **Yes** when prompted to confirm the action. The job folder and all jobs within that folder are deleted.
6. Right-click the **SmartStart Toolkit and Hardware Configuration Events** job folder, and select **Delete.**
7. Click **Yes** when prompted to confirm the action. The job folder and all jobs within that folder are deleted.

Deployment Server Directory Structure and Files

A Rapid Deployment Pack 2.*xx* upgrade populates the Deployment Server with tools, scripts, configuration files, software drivers, and documentation. The ProLiant Integration Module components are placed in the new .\lib directory. The previous Rapid Deployment Pack 1.*xx* directories and files are not overwritten, except for the .\docs directory containing the documentation.

Table D-1 shows the Deployment Server directory structure for both Rapid Deployment Pack 1.*xx* and 2.*xx*.

Table D-1: Deployment Server Directory Structure

1.*xx* Directory	2.*xx* Directory	Directory Description
.\images	.\lib\images	Image files
.\deploy\configs	.\lib\hwconfig & .\lib\osconfig	Hardware, array, and partitioning configuration files, and Windows operating system installation answer files
.\deploy\tools	.\lib\bin16 & .\lib\bin32	Various applications used specifically by Rapid Deployment Pack, not provided by the SmartStart Scripting Toolkit
.\deploy\tools\scripts	.\lib\bin16	Operating system-specific batch files
.\deploy\tools\ssst	.\lib\bin16	SmartStart Scripting Toolkit
.\deploy\cds\	.\lib\osdist	Windows operating system files for system-specific scripted installs
.\deploy\cds\compaq	.\lib\osoem and .\lib\software	Windows-specific drivers and ProLiant Support Pack for Windows
.\deploy\cds\compaq\ ss.*xxx**	.\lib\osdist	Linux-specific installation kernels and initial RAM disk images for starting the operating system-specific scripted installs
.\docs	.\docs	Rapid Deployment Pack documentation
(not applicable)	.\jobs	Job .bin files

***** where *xxx* indicates the installed ProLiant Support Pack version

To remove the Rapid Deployment Pack 1.*xx* Deployment Server data files located on the Deployment Server:

CAUTION: Deleted data files can only be restored if they have not been permanently deleted from the Windows recycle bin. To restore permanently deleted Rapid Deployment Pack 1.*xx* data files, Rapid Deployment Pack 1.*xx* must be reinstalled.

1. Right-click each of the subdirectories in the .\deploy directory, and select **Remove.**
2. Click **Yes** when prompted to confirm each action.
3. Right-click each file, except the DOS_ONLY.IMG file, in the .\images directory, and select **Remove.**

   NOTE: Do not delete files from the .\lib\images directory installed with the Rapid Deployment Pack 2.*xx*.

4. Click **Yes** when prompted to confirm each action.

NFS Server Directory Structure and Files

A Rapid Deployment Pack 2.*xx* upgrade populates the NFS server with Linux installation answer files and software, which are placed in the new /usr/rdp directory. The previous Rapid Deployment Pack 1.*xx* files and software are not overwritten.

Table D-2 shows the NFS server directory structure for both Rapid Deployment Pack 1.*xx* and 2.*xx*.

Table D-2: NFS Server Directory Structure

1.*xx* Directory (/usr/cpqrdp)	2.*xx* Directory (/usr/rdp)	Directory Description
/ss.*xxx*/yyyy*	/osconfig	Linux installation answer files: Red Hat kickstart files and SUSE control files
/*yyyy**	/osdist	Linux distribution files
/ss.*xxx*/*yyyy*/csp*	/osoem	Software drivers and files needed during the operating system installation**

* where *xxx* indicates the installed ProLiant Support Pack version and *yyyy* indicates the operating system shortcut name

** ProLiant Support Pack files previously located at /usr/cpqrdp/ss.*xxx*/*yyyy*/csp for 1.*xx* Linux scripted installs are now located on the Deployment Server at .\lib\software. The Altiris Deployment Agent for Linux, adlagent, is still located on the NFS server at the new location, /usr/rdp/osoem/altiris.

CAUTION: Deleted data files cannot be restored. Rapid Deployment Pack 1.*xx* must be reinstalled to restore Rapid Deployment Pack 1.*xx* data files.

To remove the Rapid Deployment Pack 1.*xx* NFS server data files located on the NFS server, execute the following command:

```
rm –rf /usr/cpqrdp
```

This command removes the /usr/cpqrdp directory, subdirectories, and files.

IMPORTANT: You are not prompted to confirm removal of the files using the –f option with the remove command.

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